



Medusa

SOLVING THE
MYSTERY OF
THE GORGON

STEPHEN R. WILK

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IT IS IRONIC THAT, although writing a book is a phenomenally antisocial activity, the result of hours in the library or hunched over a computer keyboard, the author still finds himself indebted to a huge number of people. Part of the reward you get for all the effort of putting together a book like this is that it gives you a legitimate excuse for elbowing your way into the affairs of people you would otherwise never get to meet. The oddball trajectory of this book shows just how wide a range of people and specialties you can encounter. Classical scholars and museum curators, forensic scientists and doctors, animal behaviorists and architects, motion picture aficionados, astronomers, entomologists, artists, and theologians. It has been an interesting journey. I am immensely grateful to those who talked with me, suggested ideas, offered articles or illustrations, and expressed curiosity about my theses. My including their names in this list does not mean that they agree with any or all of my ideas. Some expressed skepticism about the possibilities I raised, which is as it should be.

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I am grateful to DC Comics for permission to reproduce the cover of the Superman comic. I must note, however, that the account of the development of the character of Superman I give here has not been read or approved by them. I stand by my interpretation, even where there are deviations from Les Daniels's recently published *Superman: The Complete History*.

I hope with this book to lift the Curse of the Gorgon. In the course of researching it I have found that three people (at least) had announced that they would shortly be publishing books on the topic—books that never did get published. Jerome Lettvin, Thalia Howe/Feldman, and Emily Erwin Culpepper announced that they would extend their articles into full-length works that, for some reason, never materialized. With this work I hope that their ideas will at last reach a broader audience.

CONTENTS

PART I THE MYSTERY

- 1 The Nature of Myth
- 2 The Myth of Perseus and Medusa
- 3 The Gorgon in Art
- 4 Parallels from Around the World
- 5 Explanations

PART II THE SOLUTION

- 6 Mira and Algol
- 7 The Surrounding Sky
- 8 The Face on the Shield
- 9 Gorgons and Gargoyles
- 10 What the Gorgon Really Was
- 11 The Gorgon Today
- 12 Synthesis
- Appendix
- Notes
- References
- Index

PART I: THE MYSTERY

1

THE NATURE OF MYTH

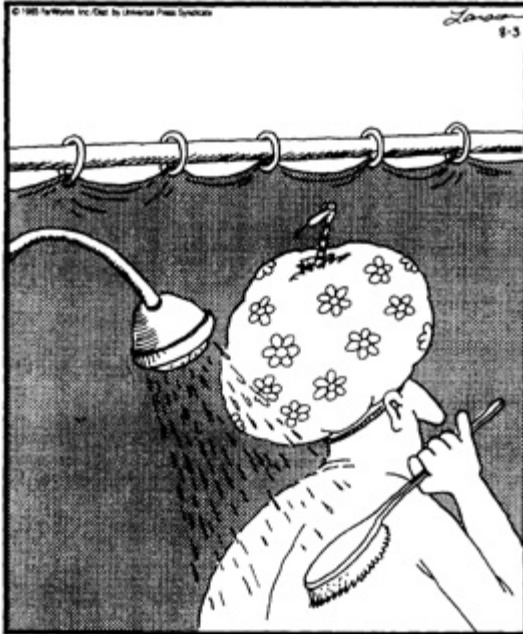
I have made a study of this and several other medusas and, hence, am able to tell you a little about them.

—Charles G. Finney,
The Circus of Dr. Lao, 1935

RECENTLY, THERE HAS BEEN A resurgence of interest in mythology as the baby boom generation reaches middle age and begins to ponder its place in the universe. Robert Bly's *Iron John* and Clarissa Estes's *Women Who Run with the Wolves* use myths to help modern men and women orient themselves. Mythologist Joseph Campbell has undergone an apocolocyntosis and has, like many of his subjects, become deified. His monumental series *The Masks of God* and *The Hero with a Thousand Faces* dominate the mythology shelves at libraries and bookstores. His lectures are available on audiotape, and Bill Moyers interviews him on video. The television series *Northern Exposure* adapted classic myths in new and interesting forms. Disney studios released an animated (and highly modified) version of the Hercules story for the motion picture screen. Director Sam Raimi has produced television series based on Hercules and Sinbad, using his characteristic smash-cut editing style, mixed with jarringly modern plots and dialogue and leavened with dollops of stunning computer animation. In today's world, myths are important—or at least interesting.

Myths are the stories that people tell—and that are told and retold so often that everyone knows them. Their plots and features are so well known that no more than a quote or a description is necessary to invoke the whole story in people's minds:

- Fe-Fi-Fo-Fum
- A suit of Lincoln green
- Shot an apple from his son's head
- Pulled the sword out of the stone
- Twelve labors
- Golden fleece



Medusa starts her day

1.1 *The Gorgon is so familiar that Gary Larson doesn't have to explain what it is for his readers to get the joke. The Far Side © 1985 FARWORKS, Inc. Used by permission of Universal Press Syndicate. All rights reserved.*

The titles and characters of these myths become bywords and proverbs. They form a commonly understood background to which anyone in the culture can refer and expect to be understood. Stories that important must fulfill some deep needs—they teach important things or are an essential part of a people's religions, or of their pasts. And in addition, they are vastly entertaining.

I do not attempt here to distinguish between the shades of meaning of *myth* and *legend* and *folktale*. The boundaries between these different forms are nebulous. I except from the definition works that are clearly the result of a single mind. *The Golden Ass* of Apuleius, despite its use of mythological characters and elements, is clearly an original work, an ancient fantastical novel. So, too, are the lost works of Dionysius Skytobrachion (which nevertheless continue to influence the ongoing development of the myth of the Gorgon). In contrast, the works of Homer and of Ovid are, despite their careful arrangement and original styles, clearly retellings of established, traditional stories.

People are never content simply to let such stories be. Even the ancient world saw attempts to explain features of the myths. In

modern times the interpreters have increased in number. Myths are seen as historical chronicles, psychological records, attempts at scientific explanation, and linguistic exercises. Some of the more outrageous interpretations—those that explain the myths as evidence of contact with extraterrestrials, or of lost sciences and civilizations, or of ancient planetary cataclysms—give us, I think, better glimpses of modern minds than of ancient ones.

The temptation to interpret myths is irresistible, partly because it seems as if any stories so long-lived *must* have some elements of truth behind them, and partly because there are cases in which an interesting interpretation has, in fact, been found to be true. Heinrich Schliemann believed that the legends of the Trojan War referred to a real event—and he found the remains of Troy. Part of the problem with interpreting myths is that different myths, or different parts of the same myth, may fit into very different niches.

Consider the myth of Phryxus. Who, you may ask, is Phryxus? His story is unfamiliar, yet it contains as many memorable elements as the story of Perseus and Medusa. For some reason it has not achieved the same universal modern recognition.

Phryxus was the son of Athamas, king of Boeotia, and Nephele (“Cloud”), a woman with a very interesting past. Zeus created her from vapor to be a duplicate of his wife, Hera, the queen of the gods. She was intended as a decoy to deceive a would-be seducer, Ixion. Nephele served her purpose well, and Ixion was caught and punished by Zeus. Afterward, however, Zeus had no use for the cloud-woman. Lacking a purpose, Nephele wandered the halls of Olympus, until finally Hera ordered Athamas to marry her.

Besides Phryxus, Nephele and Athamas had another son, Leucon, and a daughter, Helle. Despite their apparently thriving family life, relations between Athamas and Nephele were strained, as well they might be in a forced marriage between a hero and a cloud. Athamas fell in love with Ino, the mortal daughter of King Cadmus, and the two had an affair resulting in two sons, Learchus and Melicertes.

Nephele learned of the adultery and retreated to Olympus to tell Hera, who put a curse on the house of Athamas. Ino retaliated by arranging for the crops to fail and by bribing an oracle to declare that the only remedy was to sacrifice Nephele’s son, Phryxus.

Just as the people were preparing to sacrifice Phryxus and his sister Helle, Nephele provided magical aid in the form of a ram with a golden fleece. Phryxus and Helle climbed upon its back, and the ram bore them away across the straits to Asia Minor (modern Turkey). Partway across, Helle lost her grip and fell into the straits, which are now called the Hellespont in her memory. Phryxus clung on and was

borne to the land of Colchis in present-day Turkey, where he sacrificed the ram to Zeus. Its golden fleece was hung upon a tree and guarded by a serpent, later to become the object of the famous quest by Jason and the Argonauts.

This brief story illustrates many of the different facets of myth. In the first place, it is more concerned with familial relationships than it is with fabulous elements. To the Greeks, it was as important that Phryxus was the son of the king of Boeotia and Hera's vaporous double as that he was saved by a golden ram. It also shows how interrelated many of the stories are—references in this one bind the tragedy of the house of Athamas to the glory of Cadmus and the founding of Thebes, to the treacheries and deceits of Ixion, and to Jason, the Argonauts, and the quest for the Golden Fleece.

But there is much more to this myth than the web of familial relationships and references to other myths. In the story of Helle and the naming of the Hellespont we have an example of the eponymous nature of myth. Helle isn't necessary to the story, and where she does appear she seems to have been stuck in as an afterthought. She apparently serves no purpose except to die so as to provide a name for the straits.

Robert Graves interprets the story of Nephele and Athamas as the mating of the King, as representative/incarnation of the thunder-god, with the sky itself. (Athamas's brother Salmoneus was killed by a lightning bolt from Zeus for his arrogance in imitating the king of the gods.) The rivalry between Ino and Nephele recalls, he says, the conflict between the agricultural Ionian settlers and the pastoral Aeolian settlers of Boeotia, and the threatened sacrifice of Phryxus is probably a softened version of the story of a real sacrifice of the boy. Other myths of threatened sacrifice—notably that of Iphigenia, daughter of Agamemnon and Clytemnestra—depict an actual sacrifice in their early versions. Later versions have the gods snatching the intended victim away and substituting an animal. One cannot help but think of the sacrifice of Abraham and Isaac's last-minute reprieve. It is quite possible that the original version had Isaac dying under the knife.

Finally, there is the wonderful golden ram itself. An intriguing explanation of this element is that the Golden Fleece derives from the ancient practice of "mining" gold from streams by weighting down fresh, unshorn sheepskins in mountain streams, where they trapped fine particles of gold dust being washed down from the ore beds. After a fleece had lain in the stream for a while, it would become saturated with gold, becoming a true "golden fleece." The gold was collected by drying the fleece and burning it—quite literally sacrificing a potentially useful pelt—so that the animal material was burned away,

leaving puddles of melted gold behind.

So what is myth? Is it a collection of relationships? Explanations of names? Recollections of ancient conflicts? Memories of old customs? Skewed records of arcane science and technology? As the above example shows, it is all this and more.

Almost as interesting as the question of what myths are is the way in which they are remembered. The reason that the mythology collections of Edith Hamilton and Charles Bulfinch are so popular is that the Greeks and Romans left so few complete accounts of their myths. It's not that they disdained the myths or were incapable of recounting them. *The Iliad* and *The Odyssey*, Apollodorus's *The Voyage of Argo*, and Ovid's *Metamorphoses* all attest to the interest and skill of ancient writers. The problem is that these myths were common coin in the days of the Greeks, and everyone was familiar with them. They would no more think of retelling such common stories than a person today would feel the need to explain who Lois Lane and Clark Kent are.

Since everyone was so familiar with the stories, it wasn't even necessary always to identify characters by name. Poseidon might be called "the earth mover" or "the dark-haired one." Future historians reconstructing American popular culture of the twentieth century might have a hard time deducing who Kirk and Spock were. Fortunately, we are such compulsive record keepers that it's likely plenty of full references to *Star Trek* will still exist. But imagine how hard it would be to understand these references if no copies of the videotapes or scripts survived, and all we had to go by in reconstructing the series were occasional references in news magazines to "dilithium crystals," "transporters," and "pointy-eared Vulcans." Much of the richness of ancient stories and their context has doubtless been lost to us because nothing and no one recorded the threads of everyday life. That is why historians and archaeologists get so excited over such events as the discovery of Pompeii and Herculaneum, or (for a much more recent example) the Alpine Iceman Ötzi. These unexpected tragedies preserve a snapshot of everyday ancient life. As a result, we now know how the Pompeiians furnished their rooms and painted their walls. We know how Bronze Age travelers wrapped their feet and what they ate. Some things, however, aren't preserved very well. No one knows the latest joke the Iceman heard or understands all the obscure graffiti on the walls of Pompeii.

Often myths have come down to us as a fortuitous by-product of something else. A poet or dramatist might bring in a myth as an allusion to his main story. The incidents are similar, or some character is related to one in another myth. The story of Phryxus, as recounted above, doesn't appear in full anywhere in existing fragments of

ancient literature. One would think that Apollonius of Rhodes, in his epic poem “Voyage of the Argo,” would tell the story. This is one of the longer and more complete ancient accounts of a classic myth, and the story of the Fleece’s origin would seem to be of more than passing interest to Apollonius. After all, it tells the background of the object of the Argonauts’ quest. Yet the story is recounted only in bits and pieces, spread throughout the narrative. Homer, writing at least two centuries earlier, doesn’t mention it at all. He does mention Ino, but in an entirely different context.

For an ancient Greek source, we must turn to the fourth Pythian Ode of Pindar (fifth century B.C.E.). Pindar’s mention is brief; it tells about the soul of Phryxus in Hades calling for the fleece of the ram that saved him. Sophocles, Aeschylus, and Euripides all wrote plays based on the story, but all these have been lost, and we don’t know what they said. The first complete tellings we have of the story of Phryxus are in the collections of myths set down by the comparatively recent Apollodorus (first century B.C.E.) and Hyginus (first century C.E.)

The second-century Greek travel writer, Pausanias, includes the story, with about as much detail as Apollodorus and Hyginus, in his account of Attica. Pausanias is always interesting to read. His book is a travel guide to the religious and historical sights of Greece. For instance, he points out the very rock where Ino was supposed to have thrown herself into the sea. But he always spoils the miraculous nature of the story with a strict rationalism. Pausanias doesn’t believe in miracles, and he always looks for some naturalistic explanation behind the story. In his account, for instance, Phryxus is not saved by a mystical ram, but by a dolphin.

We also have the story as represented in art. Phryxus borne by the ram appeared in sculpture before the fifth century B.C.E. and was a popular subject on red-figure vases in Attica and southern Italy from the mid-fifth century on. There is also a mid-fifth-century terra-cotta figure from a wooden chest. All show Phryxus clinging rather precariously to a swimming ram. (I know of no example that shows Helle being rescued by the ram. Perhaps, in all these cases, she has already dropped off. More likely, her adoption into the myth came after the creation of the red-figured vases.)

What is particularly interesting is that the most outrageous elements of the story as it was later told—that the ram had a golden fleece, and that it bore Phryxus away through the air—are missing from the very earliest accounts and pictures. Myths are not static, but change through time. This is not really surprising—seven hundred years separate the odes of Pindar and the red-figure vases from the guidebooks of the rationalist Pausanias, and one would expect the story to change in that time. The core of the narrative remains the

same, but elements accrete, like barnacles growing on a ship, until the entire story has undergone a sea change, covered with new and strange details.

If one accepts the hypotheses above regarding the early history of the story, then the myth of Phryxus started out as the story of the ritual sacrifice of the king (who is the incarnation of Zeus); it became the story of an aborted sacrifice when popular feeling rejected human sacrifice. The myth centered on the victim's escape on the back of a ram, which became a swimming ram, then a flying ram, and finally a golden ram. Not only is the myth we know today the sum of extremely diverse parts, but it has also changed through time. If one wants to sit down and try to analyze the myth, one first has to decide at what point in its history to freeze the myth for study

There is another problem in trying to analyze myths: How does one distinguish between a folk story, which is the common property of a people, and the work of an individual writer? The problem is important, because frequently we have only one writer to go by. Homer's *Iliad* and *Odyssey* are two of the oldest written forms of Greek myth, but Homer is widely believed to have altered myths to suit his purposes. Certainly Ovid did. He alone has Perseus turn the giant Atlas into Mount Atlas by showing him the head of Medusa. But Hercules later temporarily took the sky from Atlas's shoulders, and Hercules was Perseus's descendent. In his *Amores*, Ovid talks of "giving Perseus the flying horse," yet Pegasus was the steed of Bellerophon, not Perseus.

It was Ovid who first confused the sisters Procne and Philomela in their sad myth. This mistake makes a mess of the point of the tale, and in his error Ovid has mislead generations of poets.

Much of Virgil's *Aeneid* is the product of the poet's own mind. How much of it should be regarded as myth? This sort of thing becomes important when one tries to trace the history of an image. When Euripides, in his play *Ion*, has Athena rather than Perseus slaying the Gorgon, is he recounting a traditional version of the tale, or is he innovating for effect? Did Aeschylus appropriate the image of the Gorgon to give concrete form to the previously unpictured Furies (as Thalia Phyllies Howe suggested), or is he using an image already well established? One certain thing is that the medium used to tell the story certainly influences the story being told. The medium is *not* the message, Marshall McLuhan notwithstanding, but the medium strongly affects how the message is conveyed. Some myths are known only from vase paintings. No written record of them survives, so they are, therefore, simply photogenic images. No one can convey the intricate webs of familial relationships through vase paintings, but these survive in the written records.

A later example of a myth that grew by accretion is the story of King Arthur of Britain. Although it has been argued that Arthur never existed in any form, the prevailing opinion seems to be that he was a real person, a *dux bellorum* who led the Romano-Celtic forces at the battle of Mount Badon in or about the early sixth century. In the past fifteen years there have been at least five works that have attempted to identify the elusive Leader of Battles by his given name. Geoffrey Ashe's *The Discovery of King Arthur*, Graham Phillips and Martin Keatman's *King Arthur: The True Story*, Baram Blackett and Alan Wilson's *Artorius Rex Discovered*, Norma Goodrich's *King Arthur*, and Chris Barber and David Pykitt's *Journey to Avalon* each identify a different candidate, and each castigates their predecessors for their lack of insight.

Although there are allusions to Arthur in Welsh tradition, the first coherent narrative about him dates from seven centuries after his alleged time. Geoffrey of Monmouth was a twelfth-century priest about whom we know very little. His *History of the Kings of Britain* (1135 C.E.) tells the history of Britain from the time of Brutus (circa 1115 B.C.E.) to 689 C.E. The story of King Arthur is only one part of this history, although it occupies the largest single section. Some of the sources Geoffrey used have been identified, but not the ones for the story of Arthur. In his preface, Geoffrey claims that these came from "an ancient book written in the British language."

Geoffrey seems to have composed much of his material himself (Geoffrey Ashe calls his work a "literary fraud"), but much of his Arthurian material is clearly genuine. Among the bits and pieces that we know from earlier writings are Arthur himself, Sir Kay, Sir Bedivere, Mordred, Tristram, Guinevere, King Mark, Iseult, and Sir Gawaine.

Geoffrey at least gives these characters a history, although we may wonder how much of it accurately reflects Welsh stories. Merlin appears for the first time in Geoffrey's work, and ever afterward he is inseparable from the story of Arthur.

In Geoffrey's account, Arthur's father-to-be, Uther Pendragon, is seized with desire for Ygerna, wife of Gorlois of Cornwall. Merlin helps him to seduce Ygerna, using his "drugs" to make Uther appear to be Gorlois. The result of Uther and Ygerna's union is Arthur. Unlike later legends, however, Geoffrey does not have Arthur disappear with Merlin for a number of years, nor is he finally recognized as king by pulling a sword from a stone (or anvil). Instead, Arthur is accepted as Uther's son and crowned king at the age of fifteen, after Uther has died. There is no Round Table, no series of quests, no Holy Grail, no Lancelot, no Galahad, no Percival.

But the tale nonetheless had remarkable resonance, and within thirty-five years of the appearance of Geoffrey's book, an anonymous commentator could ask, "What place is there within the bounds of the empire of Christendom to which the winged praise of Arthur the Briton has not extended?"

The next notable author in the line of Arthurian chroniclers was Wace, a Jerseyman (and perhaps a teacher), who rendered the Arthurian portion of Geoffrey's history into French verse sometime before 1155 (twenty years after Geoffrey) in his *Roman de Brut*. Wace may have gleaned from sources other than Geoffrey, since he adds to the story. His most important addition is the first mention of the Round Table.

Within thirty-five more years the tale was reworked into English by Layamon, an English priest who composed the *Brut*, clearly basing it on Wace's work. But Layamon builds on Wace, most tellingly by adding fantastic elements—Arthur is raised by elves (not by Merlin) and is borne away to "Avallon" after his last battle, to be healed of his wounds and return again. In this embroidering of the story, Layamon is like those late contributors to the myth of Phryxus who gradually turned a swimming ram into a flying golden one.

Chrétien de Troyes was an approximate contemporary of Layamon. Five of his verse romances have survived—*Eric et Enide*, *Cliges*, *Yvain*, *Perceval*, and *Lancelot*. A sixth, *Conte du Graal*, was partly authored by him. He is the first to bring Lancelot and Perceval into the story and to set Arthur's court at Camelot. Although there is an earlier tradition of a sacred cauldron, *Conte du Graal* is the first work about a cup with Christian associations and the first recorded use of the term "grail."

Already we are far removed from the quasi-historical character of Geoffrey. Over the next three hundred years Arthurian romances popped up all over Europe and pushed the central character still further away from reality. The crowning touch was Thomas Mallory's *Le Morte d'Arthur* (published at the end of the fifteenth century), which solidified the basic story as it is told today.

As an example of how the medium can transform a story, consider a modern example—Superman. Although Superman is a modern commercial figure, created less than one human lifetime ago (he first appeared in 1938), his evolving story tells a lot about how tales can change in response to different environments.

The roots of Superman the comic book character lie in pulp magazines and science fiction. In 1930 Philip G. Wylie published the novel *The Gladiator* about Hugo Danner, a biologist's son who is given extraordinary powers—he has incredible strength, can leap great distances, and his skin is tough enough to resist injury. After his

parents die, Danner becomes a war hero. The book served as the basis for a largely forgotten 1938 movie of the same name.

In 1935, *Doc Savage* magazine appeared. This magazine ran for sixteen years, each issue carrying a new adventure of the title character and his band of experts. (During the 1960s these were reprinted in paperback, and in 1974 a very campy George Pal motion picture based on the series was released.) Most of the stories were the work of Lester Dent, who published them under the house name of Kenneth Robeson. In these stories, Clark “Doc” Savage, the son of a famous father, has been raised to be a paragon of intellectual and physical virtue. Because of his tanned, perfect body, he is known as “the Man of Bronze.” But he exercises great mental abilities as well. Together with his five sidekicks, he fights evil and rights wrongs.

The comic book character of Superman was the work of Jerome Siegel and Joe Schuster, a couple of boys from Cleveland, Ohio. They began working out the character in 1933, when both were seventeen years old. Siegel was the writer and Schuster the artist. That they drew their inspiration from the pulp magazines was undeniable. Siegel had even reviewed *The Gladiator* for the fan magazine he edited. It was reportedly one of his favorite stories. The idea of making his hero the son of extraterrestrials and attributing his powers to his being born on a planet more massive than Earth might have been inspired by the Aarn Munro stories of John W Campbell, which began appearing in 1934.

Siegel and Schuster peddled their creation continually, tinkering with him through the years. At first he wore street clothes, but later they put him in the familiar brightly colored tights and red cape. Comics artist and historian James Steranko claims that Schuster’s drawing of Superman was heavily influenced by the promotional ads for Doc Savage, which read “SUPERMAN” across the top in large print. (Note, also, that Doc’s first name, Clark, was the same as that given to Superman by his adoptive parents, the Kents.)

Finally, the Superman story was accepted by editor M. C. Gaines, and the first thirteen-page story appeared in the first issue of *Action Comics*, with a surprising picture of the garishly costumed Superman on the cover, holding an automobile above his head.

Today the costumed, super-powered superhero is a convention, a cliché, but consider how this first cover must have looked to readers in the 1930s. At the time, although pulp magazines and movie serials had introduced mass audiences to fantastic characters and gimmicks, there still had been nothing quite like this. The comic book superhero is as stylized and stilted a convention as any other in popular art, but long familiarity has blunted the weirdness of it for most of us.

The son of a scientist, a being from a heavier world, boasting enhanced capabilities, Superman was Aarn Munro, Clark Savage, and Hugo Danner rolled into one. Clark Kent was not merely a man of Bronze, like Savage, but the Man of Steel. His creators rounded out his personal history with a Moses-like rescue from certain death, and the result was amazingly successful.

Steranko claims that success didn't really strike until the fourth issue of *Action Comics*, after publisher Harry Donenfeld commissioned a survey to find out why sales were up and found that the Superman features were responsible. (Each issue of *Action Comics* carried many features, after all.) Donenfeld ordered the new character "plastered on every *Action* cover. They sold out. He gave Superman his own book, reprinting one early story. It, too, sold out." Steranko is almost certainly correct in attributing the success of the new character to readers' identification with the handsome and powerful Superman—"... he was the graphic representation of the ultimate childhood dream-self." But surely another reason all those issues sold out was that stunningly visible blue-and-red costume, with its flamboyant and useless red cape. If readers saw it on the cover, they knew it was in the magazine. And so superheroes have colorful costumes not for some odd psychological reason, but because they sold magazines.¹

Other aspects of the Superman mythos can also be seen to have developed for such blandly practical reasons. The early Superman strips were sparse, with few of the conventions we have come to associate with them today. Clark Kent worked with fellow reporter Lois Lane at the *Daily Star*, under the editorship of George Taylor. Lois provided the impetus for many adventures, since Superman was perpetually having to rescue her. Over time, Taylor became Perry White and the *Daily Star* became the *Daily Planet*.

Arguably, the first big change—from street clothes to a colorful costume—came about because Superman was a pulp (print) character who had moved to a graphic (picture) medium. It was only by accident that the advantage of his costume became known. The next change, however, was deliberate and resulted from another change in medium.

The first radio show about Superman was broadcast on February 12, 1940, and featured Bud Collyer as Kent/Superman. Schuster's graphics couldn't be seen over the radio, of course, and Superman's powers had to be suggested by audio effects. The problem came when the writers tried to advance the story. Radio is a dramatic medium, and it works far better when the story unfolds through dialogue rather than through descriptions given by an omniscient narrator. During those times when Lois Lane was in trouble, Clark Kent needed someone to talk to. (He couldn't talk to himself without appearing

even more schizophrenic than he already was.) So Bob Maxwell, the show's producer, created a new character—"cub" reporter Jimmy Olsen—to give Clark Kent and Superman someone to hold a conversation with.

Another big change came with another change of medium. The Fleischer cartoon studio, previously known for creating Popeye and Betty Boop, began working on animated Superman cartoons in early 1941. The studio released its first, entitled simply *Superman*, on September 26, 1941.



1.2 One of Superman's first cover appearances. The vivid colors of Superman's costume helped make him a success. Superman is a trademark of DC Comics © 1998. All rights reserved. Used with permission.

The cartoons' simplified renderings of Clark, Lois, Perry, and the Planet (Jimmy never appeared in any of the seventeen cartoons) were effective, and Superman's bright costume was often set off by scenes of the dark city surrounding him. But one big change was needed. As the introduction to the cartoons noted (and as later repeated in the live-action television series), Superman was "faster than a speeding bullet, more powerful than a locomotive, and *able to leap tall buildings at a single bound*" The figure on the screen performed all of these acts

as the voice-over announced them. The leaping over a building seems a peculiar act, and it is not until you watch this that you realize doing so only makes sense for a character who cannot fly. At that point you also realize why it is that Superman began to fly in 1941—the leaping superhero looks, as one critic put it, “like an anthropomorphic kangaroo.” Superman began to fly in the cartoons as a way to preserve his dignity, although the dramatic advantages of it soon became obvious as well.

Superman began altering his power from superhuman leaps to true flight in the comics at just the same time he was being adapted to the movie screen. In the March/April 1941 issue of *Superman*, he was still leaping, but in the May/June issue he hovered, and by the July/August issue he could change course and maneuver in midair. Nevertheless, it wasn’t until two years later that the comics explicitly noted his ability to fly.

Additional changes made to the character over the years were often due to the story’s adaptation for these other media. (For instance, in the Fleischer cartoons, Superman on a couple of occasions changed into his costume in an art deco phone booth with translucent walls. He did this only rarely in the cartoons and never in the comics, on the radio, or in the television show or movies. But the image of Superman “changing in a phone booth” has become established indelibly in the public consciousness.) All the changes listed above are significant in that they show how the myth changed in response to the limitations or capabilities of a new medium.

If examples culled from Superman seem too far-fetched, then consider the story of St. Wilgefortis, daughter of the king of Portugal. She was betrothed against her will to the king of Sicily but refused to marry him because she had taken a vow of virginity. She prayed for a solution, and Heaven answered her petition in an unusual way—she grew a beard. The Sicilian king broke off the engagement, and her father had Wilgefortis crucified.

This story, it is now felt, was inspired by a misunderstanding of an artistic convention. In some cases the crucified Christ was depicted wearing a long gown, rather than the customary loincloth. This gown looked like a woman’s dress, and the story of Wilgefortis arose to explain why a bearded woman was being crucified. The same story is told of other saints, including St. Kummernis, St. Liberata, St. Livrade, and St. Uncumber. In all cases, the martyr has been invoked as a patron saint by women who wish to be divested of their husbands—as the rather transparent names “Liberata,” “Uncumber,” and “Kummernis” (German for “trouble”) might suggest.

There is something attractively simple about this deriving of myths

from misunderstood art, and it is easy to overuse the explanation. Robert Graves was particularly vulnerable to the temptation, and his book *The Greek Myths* bristles with dubious derivations of myths from images and artworks. Unfortunately, most of Graves's supposed original images have never been found. Graves has no problem positing their existence, but those of a skeptical bent lack confidence in his explanations.

The point of these examples is that myths can change through time by the addition of elements prompted by any number of causes. They can reflect bits of natural science or engineering cleverness (as with the explanation of the Golden Fleece), or they can be explanations for place names (as with Helle and the Hellespont), or they can relate bits of genealogy, or they can be marvelous devices and ideas imported from other sources (the flying golden ram, or perhaps the Round Table itself). Rationalizations can make their way into tales (as with the pagan Celtic Graal, which became the Christian Grail, the cup that many said was used at the Last Supper). Story elements may be added to suit the medium used, as with Superman or Wilgefortis, and may then be retained when the story is transferred to another medium.

This is why I believe that explanations for myths that rely on a single mechanism are often insufficient. Myth as survival of a ritual, or myth as misremembered history, or even myth as psychodrama are convenient categories, but an extended myth will have acquired baggage from many other sources over the course of a long life. Some hold that “myth” refers to stories that tell great, deep, universal truths and are linked to specific places, whereas “folktales” are wonder-stories that are not tied to any distinct place or time. This distinction is foggy, however. Both Edwin Hartland and Stith Thomson classified the story of Perseus and the Gorgon as a folktale, yet (as we shall see) the story as we have it abounds with real people and places. Pausanias identifies some of the sites, as do other authors up through the Middle Ages. But their assertions prove nothing—it is easy for a story to lose its concrete localizations over time or to become associated with a strong hero from another story.

At any point in its life history, a myth can go in a number of directions, acquiring new associations or losing old ones. The storytellers responsible for perpetuating early myths, whether they worked in song, script, clay, or stone, had only their own knowledge to go by. They knew the stories as they had heard them from others, and they possessed a deep knowledge of their everyday world. Before modern times, most people were illiterate, and there were few books or libraries. We have the advantage of them in being able to survey the growth of a myth through time. Sometimes we can see the ancient storyteller struggling to understand something within the context he

knows—as when a Greek vase painter drew the Keraunos, the double-trident lightning bolt, with a central red fiery spire. The form derived from a Persian symbol in which all three elements of the bolt evidently represent equivalent forks of a lightning strike. But the Greek artist interpreted it with a burning center, perhaps because the lightning bolt glowed and could produce fire when it struck. And so a new addition was made to the mythic image of lightning.

In the following chapters of the first part of this book I will retell the myth of Perseus and Medusa, show how it has been depicted in art, and give some of the proposed explanations for its bizarre imagery. In the second part, we will examine the origins of some of the images associated with the myth and suggest how they came to be attached to the story

THE MYTH OF PERSEUS AND MEDUSA

This story is on the level of the fairy story. Hermes and Athena act like the fairy godmother in Cinderella. The magical wallet and cap belong to the properties fairy tales abound in everywhere. It is the only myth in which magic plays a decisive part, and it seems to have been a great favorite in Greece. Many poets allude to it.

—Edith Hamilton,
Mythology, 1942

ON A MAP OF THE EASTERN Mediterranean, Greece looks like a great three-fingered hand reaching down toward Crete. It is a right hand, with its palm down on the Aegean Sea, and it is nearly severed at the wrist by the Bay of Corinth, so that the hand—the Peloponnese—is nearly an island. Many of the historically and archaeologically important sites of early Greece lie on that almost-severed hand. Sparta is there, and Corinth, along with Olympia and Mycenae.

At the point where the thumb and forefinger meet is the ancient site of Argos. The city was believed by the ancient Greeks to be the oldest on the peninsula. Today it sits somewhat inland, but in its prime, before the harbor silted up, it overlooked the Bay of Argos. It dominated the fertile red Argolid plain from its solid hilltop position and was, naturally enough, the capital of that region. At one time its population rivaled that of Athens.

About fifteen miles distant is the ancient city of Tiryns, also set atop a bluff. It is today believed to be much older than Argos, dating back to the thirteenth century B.C.E. The city is a fortress, built out of such massive stones that they were said to have been set by the Cyclops, the Wheel-Eyed Giants.

These are the places where the family of Perseus came from—ancient productive strongholds in the most fertile section of ancient Greece, located near the Isthmus of Corinth, across which land travelers from the Peloponnese to mainland Greece had to pass, and near the Bay of Argos, with its access to the sea. Clearly this was highly desirable real estate, and it is around such regions that friction develops.

Despite what is often said about the tale, the myth of Perseus

differs from folktales and fairy tales in having very definite locations and motivations. Even in the earliest sources, Perseus is said to be the child of the royal house of Argos, and his history is intimately bound up in the struggle over Argos and Tiryns.

Although there are references to the story of Perseus spread throughout ancient literature and summaries of the main points to be found in various places, there are only three existing texts that tell the story at any length. One of these is the *Metamorphoses* of Publius Ovidius Naso, usually called Ovid. He was born just before the assassination of Julius Caesar and died when Christ was a teenager, and he wrote some of the best surviving Roman poems. His telling of the myth of Perseus and Medusa is very sophisticated. It is presented in a nonlinear fashion, and Ovid devotes much more time and space to the story of Perseus and Andromeda than other versions do. In addition, he either invents details or uses sources that differ from what we would call the “standard” version.

Somewhat more reliable is the *Library* of Apollodorus. About Apollodorus himself we know very little. He was said to have been an Athenian. Modern scholars believe him to have written during the first or second century C.E. The virtue of his work is that he recorded faithfully the details of mythology from whatever sources he found, without seeking to rewrite them himself. We know this because we have sometimes been able to identify his sources. His book is thus an incredible treasure, because it has “frozen” many important myths in older form and conveyed them without change to us. For practical purposes, every modern retelling of the Perseus myth can be traced back to Apollodorus.

We can confidently identify two of Apollodorus’s sources. One is a fragment that has survived until modern times. Since Apollodorus quotes only a little of it, it is possible that he didn’t have access to any more of the work than we do. This fragment is known as “The Shield of Hercules” and was traditionally ascribed to the ancient poet Hesiod (eighth century B.C.E.). We will have more to say about this work later.

A larger portion of Apollodorus’s account was almost certainly derived from Pherekydes, a fifth-century mythologist whose multivolume work has not survived. He was possibly an Athenian, and his purpose seems to have been the same as Apollodorus’s—to preserve in as true as possible a form the old stories. If that is the case, then we may have a considerable amount of his work buried in the surviving volumes of Apollodorus.

How do we know that Apollodorus cribbed from Pherekydes if the latter’s work hasn’t survived? Because a nameless scholar had written commentaries in his copy of the *Argonautica* (*The Voyage of the Argo*)

of Apollonius of Rhodes. These marginal notes have survived through the years through copying and recopying, and we have them today. We do not know who wrote them or when. (They are referred to as “scholia,” as are all such anonymous notes. The authors of such marginalia are all called “the Scholiast,” as if there were one great unknown authority supplying all these bits and pieces of ancient learning.) But we are fortunate that he (or she) made the notations, because he has in this way preserved two large fragments from the work of Pherekydes. Particularly lucky for us, he preserved most of the story of Perseus and Medusa.

Differences between this preserved copy and Apollodorus’s version are negligible, and so we know that this is the form the myth had assumed by at least the fifth century B.C.E., and maybe well before that. In fact, from the *Theogony* of Hesiod we have a very brief summary of the story, implying that much of its form had been acquired by the eighth century B.C.E.

And what is the story of Perseus and Medusa? I give it here as it appears in Apollodorus, with additions from elsewhere that I will note. This is the “canonical” version of the story, which must have existed by the fifth century B.C.E. There are minor variations, depending on the teller and the place, but this is the most common form.

Argos, the oldest city in Greece, was founded by Danaus, who came from Egypt. The inhabitants, his descendants, were called the Danaids. The next ruler was his nephew and son-in-law, Lynceus, followed by Lynceus’s son Abas. Abas, in turn, had twin sons, Acrisius and Proetus. These two, like the biblical brothers Jacob and Esau, quarreled with each other while still in the womb. When they grew up, they fought each other for the kingdom of Argos, and in the course of this war they invented shields. Acrisius ultimately won, driving Proetus from the city. Proetus later became king of Tiryns, and the two brothers divided the Argolid plain between them.

Acrisius had a daughter named Danae (the name probably means “woman of the Danaans”), but he wanted sons to continue his royal line. He asked an oracle how he could get sons, but he was given the unexpected message that his daughter would beget a son who would in time kill him. As always in such myths, Acrisius strove against this grim fate. His first attempt was to see that Danae never had a son. He shut her up in an underground bronze chamber, so that she would not even encounter any men.

This plan did not, of course, succeed. According to some, Proetus somehow managed to seduce her. According to the more fanciful and popular form of the story, Zeus came to her in the form of a shower of

gold, slipping easily through the gaps in her bronze cell.

Finding his daughter with child, but not wishing to kill her directly, Acrisius shut her and her newborn child into a chest and cast it into the sea. A surviving fragment from a poem by Simonides of Keos (556–467 B.C.E.), usually called “The Lament of Danae,” has the chest-borne Danae speaking to the infant Perseus and asking Zeus for help.

Danae and Perseus drifted out of the Bay of Argos and into the open Mediterranean. They were driven toward the island of Seriphos, one of the westernmost of the scattered islands called the Cyclades, about a hundred miles to the southeast of Argos.

None of the Cyclades is large. Seriphos itself encompasses only about thirty square miles and today has a population of eleven hundred people, a third of whom live in the main city, also named Seriphos. The name means “denuded,” which is appropriate, since, like the rest of the Cyclades, it is a bare and barren rock. The inhabitants today live by the tourist industry. In classical times they lived by fishing, or by scratching out iron ore from the veins in the island.

The chest was pulled from the sea by Diktys, a fisherman whose name appropriately means “net.” Danae and Diktys discovered that they were distantly related, and so Perseus and Danae stayed with the fisherman, and Perseus grew up in his house.

Now Diktys was brother to the king, Polydektes. This might seem like one of those fortuitous and unlikely coincidences that pop up in legend, but on an island as small as Seriphos it is probable that the relatives of the king were indeed fishermen. In this case the relationship was to prove a problem, because the king saw Danae and fell in love with her. One assumes that this affection was not returned (perhaps because the family ties between them made it inappropriate), but Polydektes was determined to have Danae. What stood in his way was Perseus, who had now grown to manhood and apparently opposed Polydektes (although this is nowhere stated).

Polydektes called together many friends, including Perseus. Everyone was to bring a gift. “What sort of gift?” asked Perseus. “A horse,” replied Polydektes. “The Gorgon’s head,” retorted Perseus.

It was a fateful reply, because Polydektes saw in it his chance to eliminate Perseus. When all the guests (including Perseus) brought horses, Polydektes would not accept those of Perseus. Instead he held the young man to his word and insisted upon the head of the Gorgon. There never seems to have been any question that Perseus could substitute something else for the head, or not appear at the gathering at all. This, apparently, was a matter of honor, and Perseus would

have to succeed in bringing back the head of the Gorgon or die in the attempt.¹

Perseus now lamented his fate, because the Gorgon was a deadly creature, and he would likely die in an expedition to separate one from its head. He went off by himself to the far side of the island. Here the god Hermes appeared to him and asked why he was so sad. After hearing the story, he told Perseus not to worry. Under the direction of Hermes and the goddess Athena, Perseus began his quest by first making an expedition to visit the Graiae.

The Graiae were three sisters named Enyo, Pemphredo, and Dino. They were the daughters of Ketos the sea monster and Phorkys, the Old Man of the Sea (and were therefore called the Phorkides). They had the forms of old women (although the poet Pindar calls them “swanlike”) and had only one eye and one tooth among them. They passed these around from one to another, so that each could use them in turn. Perseus managed to sneak into their midst, where he waited until one removed the eye and the tooth, then intercepted them as they were to pass from one hand to another. As soon as the Graiae realized what had happened, they cried aloud and begged for him to return the precious objects. Perseus said that he would on condition that the Graiae direct him to the Nymphs. The Graiae, over a metaphorical barrel, told Perseus what he wanted to know. In some later sources, he still doesn’t return the eye and tooth but throws them down into Lake Tritonis, an African lake near the Mediterranean.

The Nymphs had the magical devices he would need to defeat the Gorgon. From them he received winged sandals that enabled him to fly. They also gave him the cap of Hades, the ruler of the underworld, which would make him invisible. Finally, there was the kibisis. This last gift was apparently a bag of some kind, into which Perseus was to place the Gorgon’s head.² The word is not Greek and must have puzzled readers. In Apollodorus there is a note that looks suspiciously like one of those marginal scholia, explaining the word as derived from *κεισθαι* and *εσθής*, since *food* and *clothes* were kept in the bag. It’s a bad case of guessing at etymology, and the origin of the word is still not known. In translations, *kibisis* is almost always rendered as “wallet,” a translation I find unacceptable. Whatever meanings “wallet” may have had for Sir James George Frazer (who translated Apollodorus in 1921), to a late-twentieth-century American it conjures up an image of Perseus cramming Medusa’s head in among his tens and twenties.

In Apollodorus we find Hermes also contributing a gift of a *harpe*, a sickle-shaped sword. This is the traditional weapon of Perseus, and he is more often shown using a curved weapon than he is a straight sword to decapitate the monster.

Thus formidably armed (or overarmed), Perseus sought out the Gorgons. These monsters lived on the shore of Ocean, which was seen as the great, world-encircling salt stream. This means that their actual location is somewhat hazily defined. Other writers have placed them to the north, the east, or the west. One said they lived on an island called Sarpedon.

Pherekydes did not describe the Gorgons, but Apollodorus did, taking his information from the very old fragment of “The Shield of Hercules.” There were three Gorgons, named Stheno, Euryale, and Medusa. They were the daughters of Ketos and Phorkys, as were the Graiae, making the two sets of monstrous triplets sisters. Of the Gorgons, only Medusa was mortal. No reason is ever given for this odd fact.

The Gorgons had scaly heads, boar’s tusks, brazen hands, and wings. They had protruding tongues, glaring eyes, and serpents wrapped around their waists as belts. All of this agrees with depictions of the Gorgon in Greek art (see the next chapter). Note that the description does not include snakes in the hair, or snakes in place of hair. What we take as the defining feature of Medusa’s appearance didn’t enter the story until much later, making its literary debut in Ovid’s *Metamorphoses*.

The appearance of the Gorgons was so awful that anyone who looked on them was turned into stone, so Perseus was warned by the gods to look at them only in a mirror (Apollodorus states quite definitely that the mirror Perseus used was his highly polished shield). For some reason, viewing a Gorgon in the mirror attenuated her petrifying power. Fighting three monsters while looking in a mirror would be a daunting task, indeed. Fortunately, all the Gorgons were asleep when Perseus flew down toward them. Somehow he identified Medusa among the three and used his mirror to view her head as he swiped it off with his *harpe*. Apollodorus says that, even so, Athena guided his hand.

When Perseus cut off the head a peculiar thing happened: Medusa’s two children were born from her neck. These were Chrysaor, the warrior with the golden sword, and Pegasus, the flying horse. The incident appears in the ancient and venerable *Theogeny* of Hesiod, so Apollodorus dutifully included it in his own account, but almost no one else recounts the scene. It is rarely depicted in art, probably because it is so clumsy an image.

According to Hesiod, the father of Medusa’s children was “the dark-haired one” (Poseidon, god of the sea and earthquakes). Pegasus went on to roles as the bearer of Zeus’s lightning and as the steed who bore Bellerophon in his adventure with the Chimera. Chrysaor,

however, played no large part in mythology. He married Callirhoe, Ocean's daughter, and by her had the monstrous Geryones, who had three heads each. (Triplets apparently ran in the family.) According to another, no doubt very confused, account, Geryones had one head and three bodies.

Awakened by the noise and commotion of Medusa's death, Stheno and Euryale, the surviving Gorgon sisters, attacked Perseus. But he put on the cap of Hades and, becoming invisible, was able to escape.

The next part of the story is not in the surviving portion of Pherekydes (or in the works of some who copy him) but is referred to in many old sources, including the *Histories* of Herodotus. As usual, Apollodorus gathered the important parts into his narrative.

Perseus was flying back to Seriphos on his magical sandals and was passing over Ethiopia (the part of Africa along the coast of the Red Sea south of Egypt, not necessarily the modern country of that name; later accounts set the following events in Joppa, on the coast of present-day Israel) when he saw Andromeda chained to a rock as a sacrifice to the sea monster, Ketos.

Andromeda was the daughter of Kepheos, the king of Ethiopia, and Cassiepeia (or Cassiopeia), the queen. Cassiepeia had insulted Poseidon by boasting that her beauty was greater than that of the Nereids, the daughters of the sea god. In his wrath, Poseidon threatened to send a flood to devastate the city and to follow this with a visit from the sea monster. Ammon, a priest, announced that the disaster could be avoided if the princess Andromeda were chained to a rock as a sacrifice to the monster. This her parents reluctantly did.

Perseus fell in love with Andromeda as soon as he saw her. He promised Cepheos that he would kill the sea monster, if he could have Andromeda as his wife. Cepheos agreed, and Perseus promptly killed Ketos. One would think that the obvious way to do this would be to expose the Gorgon's head to the sea monster, since Perseus had it with him in the kibisis. In later versions of the story, that is just what he does, and the petrified monster becomes a rock in the harbor. But in older versions he kills the monster in more mundane fashion (if killing a monster can ever be said to be mundane). In the oldest surviving depiction, for instance, he is shown throwing rocks at Ketos.

Now, however, a new crisis developed. Phineus, to whom Andromeda had originally been betrothed, opposed her engagement to Perseus and raised an army against his rival. In some accounts, Cepheos and Cassiepeia support Phineus against Perseus. (In Hyginus, the competing suitor is named Agenor.) This time, Perseus did defeat his attackers by using the Gorgon's head, petrifying the lot.

Perseus returned to Seriphos with Andromeda. There he found

Danae and Diktys at the temple, where they had taken sanctuary against the advances of Polydektes and his forces. Once again, Perseus used the head of Medusa against his enemies, and Polydektes and his men were turned to stone. Afterward, Perseus left Diktys as king of Seriphos and returned to Argos with Danae and Andromeda. Acrisius fled when he learned of Perseus's return. He came to Larissa, an important city in Thessaly, lying near the bases of Mount Olympus and Mount Ossa. (Larissa was also the name of the acropolis at Corinth, which might be the site intended.) The old king there had died, and his son, the new king Teutamides, was holding the athletic funeral games. Perseus, who came to attend and to take part in the games, came upon Acrisius there. As Perseus was participating in the pentathlon, his thrown discus struck Acrisius on the foot, killing him.

Perseus was shamed by the death and did not wish to rule over a city because he had killed the former ruler. He arranged to trade dominions with Megapenthes, his cousin and the ruler of Tiryns. And thus Perseus became ruler of the fortified city of Tiryns. He and Andromeda had the sons Alcaeus, Sthenelus, Heleus, Mestor, and Electryon and a daughter named Gorgophone. An earlier son, Perses, remained with Kepheos and eventually became the eponymous founder of Persia (according to Herodotus).

The name of Perseus's daughter is interesting, because Gorgophone means "Gorgon-slayer." It is also the name of Perseus's aunt, the mother of Megapenthes (and a peculiar name it is since, by this canonical myth, no Gorgon had yet been slain when that grand old lady was named).

Perseus returned his magical gifts of cap, sandals, and kibisis to the gods, who returned them to the Nymphs. He gave the head of Medusa to Athena, who placed it on her shield.

This is the basic myth of Perseus, Medusa, and Andromeda. There are minor variations among many of the versions, but this form agrees in most particulars with references to the story in other places and with depictions of the story in vase paintings, wall paintings, and sculpture.

Before we go further, I'd like to make a few observations here. Apollodorus's version is the work of a compulsive completist trying to set down all the facts he has at hand. It is likely that this version is actually *too* complete. Hesiod, for example, tells the story of the birth of Chrysaor and Pegasus from Medusa's severed neck, but nothing of the rest of the tale. Pherekydes tells the bulk of the story, but omits this monstrous birth. It is probable that Apollodorus joined the accounts together himself, creating a version that contained all the strands from past accounts but that had not previously existed as a

single story. Similarly, our existing fragments of Pherekydes make no mention of Andromeda. It could just be that we lack the portion of the story in which she appears, but Andromeda is also missing from Pherekydes's later account of Perseus's return to Argos. The side trip to rescue the chained maiden interrupts the story of Perseus and Polydektes, and it is likely that in the oldest versions such an adventure did not occur at that point in the story, or perhaps it did not even happen to *this* Perseus. Apollodorus's version—which, by virtue of its appearing in what we now consider the standard reference on myths, became the canonical version of the story—represents only one snapshot of time in the history of this myth. Apollodorus's and Ovid's versions became the standards upon which later writers based their own tellings and effectively froze the myth in that form, as Mallory's *Le Morte d'Arthur* crystallized the story of King Arthur.

Nevertheless, there existed both competing earlier versions and later, non-canonical variations. In the oldest, most revered source, there is no mention of the story as we have it above. Homer knows of Perseus as a son of Danae and Zeus but says nothing further of him or his adventures. He describes the Gorgon only as a monster of the underworld. When Odysseus speaks to the spirits of the dead, he is threatened with the prospect of meeting with the head of the Gorgon, and the mere threat frightens him. The monster does not have a body, nor does it turn anyone to stone. No history of the frightening head is given. In *The Iliad*, Homer says that the Gorgon's likeness appears on the aegis of Athena and the shield of Agamemnon.

This variant history of the Gorgon was also repeated by Apollodorus. How did he reconcile this nonpetrifying monster of hell with the petrifying sister in the story of Perseus? He dealt with the question in the myth of Hercules. When that hero, in the course of his famous twelve labors, went down to Hades to fetch back Cerberus, the guardian hound of the underworld, most souls fled from him. One of the few exceptions was Medusa. Hermes (the helper of Hercules, as he had been of Perseus) told Hercules that the Gorgon he saw in Hades was the soul of the dead Gorgon, implying that after death Medusa had lost her power of petrification. Virgil placed plural Gorgons in the underworld in his *Aeneid*. The tradition seems to have drifted into obscurity after that—no medieval visions of hell feature Gorgons. But the classically minded poets of the Enlightenment brought the image to life again. Milton, drawing on Virgil, places Gorgons in hell again. The tradition also seems to have invaded the British stage, because Pope, in his *Dunciad*, refers disparagingly to the Gorgons represented in theatrical hells. But after this brief revival, the tradition died out again. No modern writer or artist pictures Gorgons in hell, although

they'd be perfect inhabitants. Gorgons have a longer and more hellish pedigree, in fact, than horned demons or burning fires. But all that's left today is a dim echo of the tradition first preserved in Homer.

ANOTHER VARIANT OF the myth presents Medusa not as one monstrous sister of three, but as a cursed beauty who, like Cassiopeia, unwisely compared herself to the Nereids in beauty. In retaliation, she was first made ugly, then beheaded. Apollodorus briefly alludes to this variant, but Ovid tells it at slightly greater length. In Ovid's version, however, Athena is angered because Medusa is raped in Athena's temple by Poseidon (perhaps inspired by Hesiod's claim that Medusa had children by Poseidon), and changes her beauty to ugliness.

The playwright Sophocles and the Roman writer Hyginus both conflate events from the longer story, having Perseus kill Acrisius at funeral games for Polydektes on the island of Seriphos. Sophocles, at least, probably altered the story for the sake of dramatic cohesion.

Euripides, in his play *Ion*, says that Athena, rather than Perseus, killed the Gorgon. The monster in this instance seems to be an unnamed creation of Gaia, but Hyginus notes the same tradition and cites Euhemerus as his authority. Yet another tradition hints that Zeus himself may have done the deed.

Perhaps the oddest tradition is one cited by that archrationalist, Pausanias. Not for him the fancies of myth. In his guidebook, he points out that there is an earthen mound near the market square in Argos, and here the head of Medusa was supposed to be buried. Pausanias is determined to give his readers what he considers to be the real story. "Leaving aside the myth," he says, "this is what has been said about her." He goes on to relate that she was a queen of her people, who lived near Lake Tritonis in Africa; she ruled after the death of her father, King Phorkys. She led the Libyans in battle and in hunting. She stood up to Perseus, who had invaded her country with a force of men from Greece. She died, not honorably in battle, but treacherously murdered by night. Nevertheless, Perseus was struck by the beauty of the dead queen and had her head removed and preserved so that he could display it in Greece.

Pausanias undoubtedly took his account from the work of Dionysius Skytobrachion, a novelist living in the second century B.C.E. in Alexandria. Skytobrachion, whose name means "leather arm," constructed his works by linking together originally unrelated bits of mythology. He is therefore about as trustworthy a source for myth as E. L. Doctorow's novels are reliable accounts of modern history. Skytobrachion's works are no longer extant, but they have been cited at length by other writers. Diodorus Siculus, a Sicilian historian of the first century B.C.E., cribbed extensively from Skytobrachion. Among the

stories he derived was a fanciful one of Amazons living in Africa (previous accounts located them near the Black Sea), where they battled a tribe called the Gorgons. Skytobrachion's tales, as funneled to posterity through Pausanias and Diodorus Siculus, would form the basis for occasional attempts to prove that the myth of Medusa was a distorted account of Greek conflicts with a matriarchal society.

Pausanias also cites the work of an otherwise unknown writer named Prokles, who lived in Carthage. Prokles had seen what he called "human savages" who had been captured and exhibited in Rome. He imagined it was possible that one such savage woman was responsible for wreaking havoc around Lake Tritonis, until Perseus killed her. It is interesting to note that Pausanias still credits Athena with helping the hero in this undertaking; there were limits to even his rationalizations.

AND THERE WE HAVE the story of the Gorgon Medusa, with all its elements. The basic motifs of the hero-adventurer, the father attempting to evade fate by indirectly killing the child who will otherwise kill him, and the hero rescuing the princess, all are common and widespread elements. But it is specific details of the story of Perseus and Medusa that excite our interest. What are the meanings of the golden shower, the underground bronze chamber, the Graiae with their shared eye and tooth, the magical arsenal presented to Perseus, the appearance of the Gorgons, the fact that only one of the three is immortal (and the other two never reappear in other stories), the petrifying head, and the sea monster?

Before moving on, I would like to discuss a few features of this myth. Note, first, that whenever human characters are involved, the myth takes place in well-defined locales. The Gorgons, the Graiae, and the Nymphs live in undefined, nebulous places, but the rest of the story is firmly pegged to the locales of Argos, Tiryns, Seriphos, Ethiopia, and Larissa. These locations aren't included simply because the encyclopedic Apollodorus was trying to cram everything in, or because the rationalist Pausanias insisted on trying to match up sites with story. They can be found also in Pherekydes and other early sources.

The fact that the Gorgons and the Graiae are both triplet daughters born of Phorkys and Keto is very suspicious. It suggests that we have here two variants of an original myth, now both enshrined in a single version. Such things have been known to occur elsewhere. The modern theory of biblical criticism holds that the many duplications in the Mosaic books of the Old Testament arose in just the same way. The so-called "J" text was, most feel, written first by an inhabitant of the kingdom of Judah. The traditional stories it contained were told

with a Judaic slant. The version called “E” was essentially written as counterpoint by an inhabitant of the northern kingdom of Israel shortly thereafter to give the Israelite interpretation. The two texts were later combined into a single edition that contained occasionally variant versions of a single event. Similarly, in the New Testament, both Mark and Matthew relate the miracle of the loaves and fishes *twice*, using very similar language in each case (Luke tells the story only once). Most scholars believe that Matthew copied from Mark, but this curious incident gives evidence that Mark also copied from other sources, and that he did not wish to leave out either version of the story.

In just such a fashion, I suggest, there were originally two variants of the story of Perseus. In one, he had to obtain the eye and the tooth of the Graiae; in the other, the head of the Gorgon. In each case he had to carry away body parts from three monstrous daughters of Phorkys and Keto. Both versions were attested to, and the authors who recorded the myth did not want to eliminate either, so both were accommodated by the present rather clumsy arrangement. in which Perseus has to find the Graiae so that they can direct him to the Nymphs (although one would have thought that the gods could do that directly), who give him the weapons he needs to fight the Gorgons. Ovid must have felt the clumsiness of this arrangement, because he reduces the Graiae to only two in number and makes them the guardians of the Gorgons.

Keto, the mother of both sets of triplets, is an interesting character. Her name was later Latinized as Cetus, with the result that Cetacean is now used to describe things having to do with whales. Keto/Cetus is also the name of the sea monster that Perseus has to kill to win Andromeda. In addition, as we will see in [Chapter 7](#), it is the name of the sea monster that Hercules must defeat to save the princess Hesione. Are all these Ketos the same creature, or is the name a generic one for sea monsters? An excellent question. Confusion of the specific with the generic occurs frequently in myth. We have no certain guidelines, although the fact that Perseus killed the one Keto while Hercules killed the other would weigh against our equating those two.

But as I have said before, mythmakers at any one time must work within the confines of their own knowledge and experience. Before the existence of a handbook like that of Apollodorus (which includes all three incarnations of Ketos), it is likely that only one or at most two versions of the monster stories would be known by any one writer, who would likely assume that the same name indicated the same creature.

Ever since the 1960s, popular writers referring to the visit of

Perseus to the Nymphs have compared it to the motion pictures in which James Bond receives his fantastic gadgets from Major Boothroyd, better known as “Q”.³ There is something attractive in this view, if only for the bizarre image it invokes. (“Now pay close attention, Perseus. To all intents and purposes this is an ordinary pair of slippers. But if you press this stud ...”) But the giving of these gifts is worth a much closer look.

In the first case, the gifts as a group provide a phenomenal example of overkill. All of the hardships Perseus would normally have had to overcome to get the Gorgon’s head are virtually eliminated in one stroke. Because he can fly using the magic slippers, he doesn’t have to arduously travel the many long miles to the Gorgons’ lair. Because he is invisible when wearing the cap of Hades, he doesn’t have to fight off the remaining two Gorgons after killing Medusa. Because he has a magic bag in which to put the head, he doesn’t run the risk of turning himself or anyone else into stone by accident. Nowhere in the myth is there a reference to anyone’s giving him a magic shield, but because he was forewarned of the need for one, and because Athena guides his hand as he delivers the fatal blow, Perseus has no need to look directly at the Gorgons and thus he again avoids being turned to stone.

There’s also a confusing multiplicity of benefactors. The god Hermes and the goddess Athena help Perseus, but the actual gifts come from the Nymphs. And the inclusion of the cap of *Hades*, which gives him invisibility, suggests the collusion of yet another god.

When all is said and done, Perseus—armed to the teeth with miraculous aids from a plethora of supernatural entities, slaying the monster as she sleeps, and then escaping by donning a cap of invisibility—doesn’t seem terribly heroic. I don’t think he would have appeared that way to an ancient audience, either. I submit that we may have here another case of concatenation, wherein the magical gifts from many different versions of the story have all been preserved in one existing form. In this theory, one version may have had Perseus being given a miraculous helmet of invisibility, by which he escaped with the head of the Gorgon, while another gave him the gift of the sandals. In one version, Athena may have told him to look at the Gorgon in a mirror so as not to be turned into stone, while in another she gave him no such advice, but did guide his sword arm. When the story was committed to writing, however, all versions were preserved, portmanteaued into one single myth. The redactor didn’t keep all the versions because he thought they were all good stories, but because he was trying to preserve the entire story, not wanting to leave out any authentic portions. And so we have our overarmed and overaided hero. As we will note in the next chapter, versions of the tale depicted

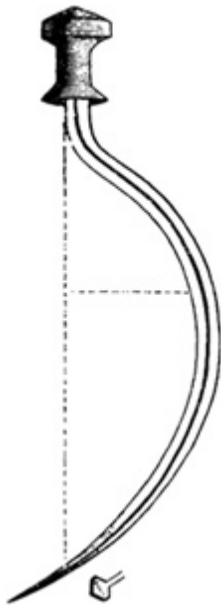
on vases show a simpler story, in which there is no suggestion of invisibility, Hermes is rarely shown, and Athena stands by Perseus but doesn't guide his stroke. Possibly the earliest versions of the story describe Perseus in a real battle with an awakened Gorgon (as some art seems to show).

What of the gifts themselves? The cap of Hades seems unnecessary. A hero ought to be able to elude pursuers even without such a device. It never reappears in mythology. The kibisis seems to be only a bag. (Claims that it is a magical bag which can expand to hold anything within, Tardislike, don't seem to be supported by any ancient sources.) The flying slippers seem to be of the same sort associated later with Hermes. It is possible that there was an original form of the myth in which Hermes himself gave this gift to Perseus, without any intermediary Nymphs (see next chapter). I will have much to say about the shield in [Chapter 8](#).

The sword of Perseus evokes considerable interest. It is not the short straight sword we would expect, but has a curved blade, sharpened on the inside. The *harpe* is the characteristic weapon of Perseus, and much has been made of it. Robert Graves, typically, associates the sword with the sickle of the moon and Perseus with lunar aspects. Others claim that, by using a weapon connected with peasantry (pressing into killing service what is really an agricultural implement), Perseus betrays his peasant origins. Yet another scholar claims that, since the sickle is the characteristic sword of the Babylonian god Marduk, its presence shows clearly the Mesopotamian origins of the Perseus story.

In fact, there is no compelling reason to believe any of this. Other characters in Greek mythology do use the *harpe*, but only a very few, and they only use it for specific purposes. Zeus uses the *harpe* in his battle against Typhon. Hercules uses it in his fight against the hydra. Hermes (again!) uses it to kill Argus. None ever uses it at any other time. Marduk has indeed been depicted with such a curved sword, but it is by no means a common depiction or a characteristic one.

Curved swords are common in the western Mediterranean. In *The Book of the Sword*, Sir Richard F Burton cites numerous examples, in which the sharpened edge can be on either the inside or outside of the blade. The earliest of these examples come from Egypt, but they are known to be related to the Hebrew *chereb* and the Phoenician *hereba*. One suspects these, in turn, are related to the Sikh *kirpan*, which is a straight sword. In fact, there is nothing to indicate definitively that the *chereb* and *hereba* were curved blades. The names may be generic words for "sword," with only the Greek form being identified with a particular shape.



2.1 Abyssinian sword in the form of a sickle. Illustration from Sir Richard Burton's *The Book of the Sword*. Reprinted by permission from Dover Publications, N.Y. 1987. Originally published by Chatto and Windus, London, 1884.

That shape, too, has changed with time. Although usually depicted as a curved blade with the sharpened edge on the inside, Perseus's weapon is often portrayed as a more traditional straight sword. Later, the two became amalgamated, and Perseus carried what is commonly called a *falchion*, a straight sword with a bill-hook at the tip. This form became the symbol of one of the degrees in the Mithraic mysteries and ultimately became the canonical form of Perseus' sword. It is thus armed that Cellini shows him.

3

THE GORGON IN ART

As Furtwangler pointed out in his admirable article on the Gorgons, the gorgoneion only appears in Greek art after the geometric period. It does not correspond exactly to any known foreign type, but there is at least a possibility that it was created on the basis of an Egyptian or Syrian form; in any case it received an entirely individual character in the hands of Greek artists, and must therefore be considered as a Greek invention—indeed, as one of the most remarkable creations of the archaic period.

—Humfry Payne,
Necrocorinthia, 1930

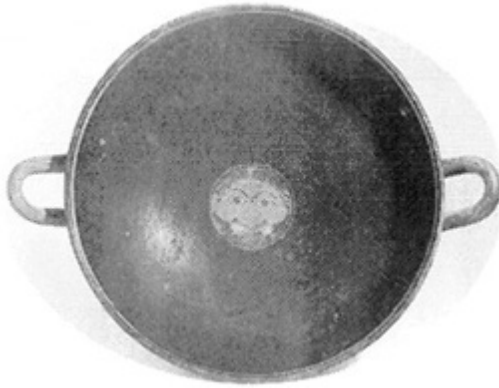
DEPICTIONS OF THE GORGON FIRST appeared around the eighth century B.C.E, and the image has been with us ever since. That's about as far back as what we would call Greek art goes, so the Gorgon is indeed one of the oldest figures in Greek art. As with all images, it has undergone changes through the years, but most of the important features held constant through classical times.

In 1896 Wilhelm Heinrich Roscher analyzed the Gorgon in art, and his description of its evolution is still the standard one. According to Roscher, the development of the Gorgon can be divided into three stages. The oldest, the *Archaic* Gorgon, runs from about the eighth century B.C.E. through about the fifth. The Gorgons that appear in “The Shield of Hercules” are perfect examples of Archaic Gorgons. They have wide-open, staring eyes and a broad grinning or snarling mouth filled with prominent teeth, usually with both upper and lower fangs. Despite the toothy display, there is a prominent, painfully protruding tongue. The extreme facial expression usually produces strongly drawn lines at the edges of the mouth and on the forehead. Both ears are visible and sometimes show signs of piercing, as for jewelry. The nose is broad and flat.

The hair is usually shown as a series of tight, curled rings above the forehead. Sometimes ringlets extend down the sides of the face, occasionally blending into a beard—pretty surprising for a creature that's supposed to be female.



3.1 *Gorgoneion from the interior of an attic KyLix (eye cup). 510–500 B.C.E. Courtesy of Museum of Fine Arts, Boston, Henry Lillie Peirce Fund.*



3.2 *An excellent example of an archaic Gorgon, from an Attic black-figure vase circa 560 B.C.E. Note the very large eyes, broad face and nose, lined forehead, stylized hair, and ear-rings. The mouth has the characteristic grimace, fangs, and protruding tongue, and this gorgoneion has both a beard and a moustache. Interestingly, both the potter who made this vase, Ergotimus, and the artist who painted it, Kleitias, have signed it. Photograph courtesy of the Metropolitan Museum of Art, Fletcher Fund, 193.*



3.3 Gorgoneion in the interior of an Attic black-figure Kylix (eye cup).
(See figure 9.13 for the exterior view.) Dated 550–500 B.C.E. Courtesy of
the Arthur M. Sackler Museum, Harvard University Art Museums, bequest
of Joseph C. Hoppin.

There is a peculiarity about the Archaic Gorgon that makes it truly unique in Greek art. Unlike almost any other mythological creature, it is always presented full-face, glaring directly out of the vase, relief, or antefix at the viewer. Depictions of heroes and gods from this period almost inevitably show them in profile. Even in later Greek and Roman art, it was rare to show a full frontal view of a character. But from the very beginning the Gorgon stared with those hauntingly large eyes directly at the viewer. There is an eeriness, a power, to such depictions, especially the emphasis on the eyes, often shown larger relative to the other facial features than they should be, giving one a sense of a creature that could truly turn the beholder to stone.

The Gorgon is often shown only as a face, its round visage filling a shield, an antefix, a coin, a rounded device on a vase, or the bottom of a bowl. It is as if its only purpose is to stare and scowl at the viewer.

But not all early Gorgons are shown as heads alone. On vase paintings, the bodies of Gorgons are sometimes shown in profile, though the heads are still turned to stare directly out of the vase at the viewer. These Gorgons are usually shown in a running posture, with curl-topped boots. Growing from their backs are sickle-shaped wings. Almost invariably these running Gorgons represent the two immortal sisters, Stheno and Euryale, pursuing the fleeing Perseus, who has the head of Medusa in his kibisis. The heads of the pursuing sisters seem to join onto the bodies without the benefit of necks (which makes you wonder just how much trouble Perseus had in chopping off Medusa's head), and seem too large for the bodies.

In the next stage defined by Roscher, the *Middle* or *Transitional* Gorgon, the heads shrink relative to the bodies and acquire necks. The

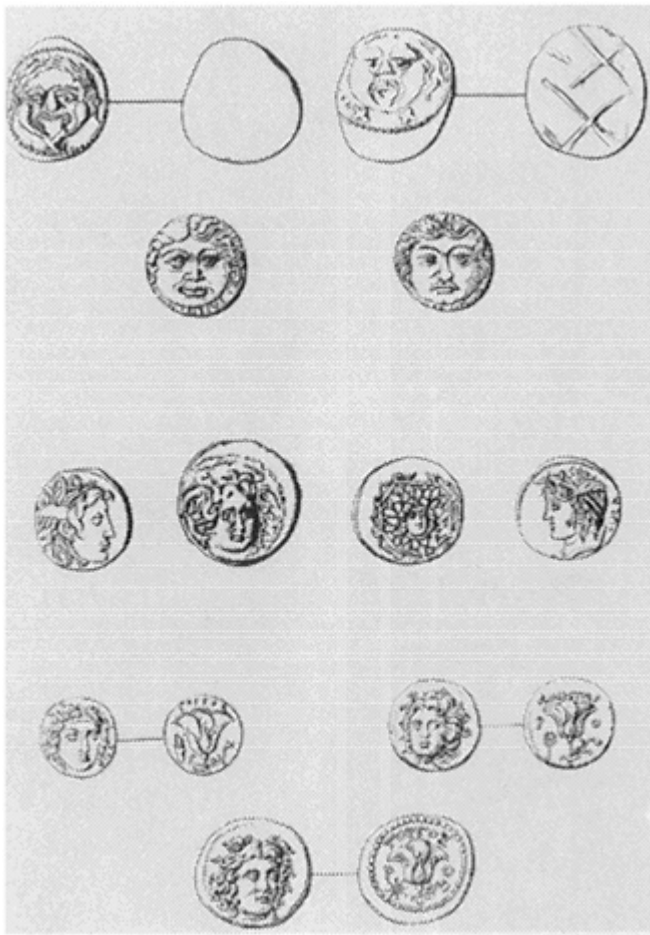
general wildness of the Gorgon's appearance is toned down. This Middle type overlaps with the Archaic and the *Late* types, lasting from perhaps the late fifth to the late second centuries B.C.E.

Finally, the *Late* or *Beautiful* Gorgon emerges gradually after the fourth century B.C.E. In this stage, the Gorgon is treated more like a traditional figure, shown in profile and three-quarter view. For the first time, Medusa is shown in sleep, with her eyes closed, so Perseus can behead her. More striking than this change from a strict frontal orientation, though, is the transformation into a beautiful Gorgon. No longer does she have a beard and fangs. The rictus grin is gone, too, and the scowling stare has been replaced by a softer look. The Gorgon ceases to be a monster and becomes a young woman. Sometimes, to emphasize her weirdness, her wings are attached to the decapitated head (making her look a bit like the "winged Liberty" on old dimes). In Roman times, the face grew rounder and plumper and took on a woeful expression. By this time the Gorgon was no longer a figure of terror, but rather one of pity. It wasn't until the Renaissance that the horrific Gorgon returned.



3.4 (left), 3.5 (right) *Perseus and a pursuing Gorgon*, from a black-figure ceramic tripod, now in Berlin. The item is Boeotian and dates from the second quarter of the sixth century B.C.E. Photograph courtesy of the Antiken Sammlung Staatliche Museen zu Berlin, Preussischen Kulturbesitz.





3.6 (top) and 3.7 (bottom) *The evolution of the Gorgon from archaic to late “beautiful” types as shown through figures on coins. These coins span a period of about 500 years. Copied from A. B. Cook’s Zeus: A Study in Ancient Religion, vol. 3 (1940) by permission of Cambridge University Press.*

Although present-day scholars retain Roscher’s three basic divisions, numerous discoveries since his time show that there are odd branches and tributaries in the artistic family tree of the Gorgon and that even the earliest Gorgons had some very odd features.

Some of the earliest images of Gorgons, consisting of heads alone, come from Corinth. These are bearded figures, displaying the characteristic teeth and tongues. When we consider that many of the earliest Gorgon images consist of only faces, that Homer’s Gorgon also apparently didn’t have a body, and that even full-body Gorgons had oversized, neckless, stylized heads, it is logical to suppose that

Gorgons may have started out as masks. Those oversized heads on Stheno and Euryale might, after all, be accurate depictions of masked dancers from some play or ceremony. It would be easy to visualize such creatures full-face, or to depict them as heads alone, if one had the example of full-face, heads-only masks as inspiration.



3.8 Head of Medusa. A Roman floor mosaic from Ephesus in modern Turkey, circa 440–450 B.C.E. This is clearly a late-style Medusa. The face is that of a plump woman, lacking the staring eyes, fangs, protruding tongue, or the beard. The wings in the hair are also typical of a late Gorgon. Original is in the museum in Selcuk, Turkey. Photograph courtesy of Erich Lessing/Art Resource, N.Y.

Although it's rarely mentioned, such Gorgon masks have in fact been found, and they are among the very earliest depictions we have. Appropriately enough, they were found at Tiryns—five large, heavy clay masks depicting monstrous heads with wide, fanged mouths, broad noses, prominent ears, and bulging pop-eyes. Although the masks could be worn, the wearers would not have been able to see through them, since there are no eyeholes. Holes in the chins show that the masks were originally adorned with beards of real hair.

These masks were found in a sacrificial pit associated with a shrine of Hera and date from the eighth or ninth century B.C.E. Although they were found over fifty years ago, so far only one of the masks has been photographically reproduced. They have all been on display in the Museum of Nauplia since the 1930s.

The only other place in Greece that has so far yielded life-sized terra-cotta masks is the sanctuary of Artemis Ortheia at Sparta. This site, excavated during the first decade of the twentieth century, yielded rich deposits of votive items, including ivory carvings, statuettes, lead figurines, and several thousand fragments of terra-cotta masks, comprising over six hundred originals. The masks date from 550–650 B.C.E. and consist of mold-produced, wearable masks with eyeholes. Fifteen of the masks have been classified as Gorgons. (Most of the others are classified as either Warriors, Old Women, or Heroes.)

It is possible that at this early stage it wasn't clear what the body of the Gorgon should look like. A famous vase found in Boeotia on the Greek mainland and now on display at the Louvre shows Perseus decapitating a Gorgon that has the body of a centaur. Perseus is clearly identifiable by his hat and by the fact that he faces away from the Gorgon. The Gorgon has a fixed, facing-out-at-the-audience stare, but its horse's body is almost unique (there are two other "hippogorgons" that I am aware of, both on early seals). Two other early examples (one from Corinth) depict Gorgon heads on bird bodies.



3.9 Perseus decapitates a strange Medusa who has the body of a horse. Decoration from a clay pithos (storage jar) now in the Louvre. The pithos comes from Boeotia and dates from the middle of the seventh century B.C.E., making this one of our earliest representations of the myth. There exist two cameos which also depict such a hippogorgon, but otherwise this form of the monster is not known. This may indicate that this depiction dates from a time when the form of the myth had not yet jelled, and there was no agreement on the form of the body of the Gorgon. Note that she is evidently not sleeping. Perseus is dressed much like Hermes, and carries a straight sword. Photograph courtesy of Musée du Louvre, Paris. Photograph by M.



3.10 *Gorgon-headed bird carrying off two youths. Drawing from a black-figure Etruscan hydria (water jar) now in the Berlin museum. It suggests that at this time the body to which the Gorgon head was attached was not clearly defined. Copied from A. B. Cook's Zeus: A Study in Ancient Religion, vol. 3 (1940) by permission of Cambridge University Press.*

But any confusion or lack of direction in early images disappeared rapidly enough as the canonical Gorgons with human bodies quickly asserted themselves. Examples dating from the same time as these odd figures show the standard human bodies, along with classic Gorgon heads. One piece deserves special mention—a vase found at Eleusis on the mainland that shows Perseus being pursued by two Gorgons with very unusual heads. These are childishly drawn, with odd, sideways eyes. Wrapped around their necks and curling over their temples are snakes. One of the Corinth examples also shows such a “wraparound” snake. Neither of these pieces really shows a Gorgon with snakes for hair, but they are the closest thing at this early date. One writer has interpreted the heads of the Eleusis Gorgons as those of bees. Whatever they are meant to be, they are unique—the rest of surviving Greek art shows nothing resembling them.

Some of the best-looking early Gorgons appear as reliefs. At Palermo in Sicily, which was a colony of Corinth, there appeared in the eighth century a painted panel showing a full-body Gorgon. She is depicted full-face, with the usual large eyes, broad nose, curled hair, prominent ears, tusks, and protruding tongue. She has a pair of curled wings springing from her back and curled-top boots. Held under one

crooked arm is a diminutive horse, possibly winged. Something is clearly missing from the other side—possibly a miniature Chrysaor. This would seem to definitely identify the Gorgon as Medusa herself.



3.11 *Painted clay relief of Medusa from Syracuse in Sicily Medusa holds a tiny figure of Pegasus in one hand and may originally have held a small figure of Chrysaor in her other. This form of the myth may violate common sense, since both were born from her neck after Perseus cut off her head, but it serves to identify the figures and the myth. The painted portions are original, while the unpainted portions are reconstructions. This figure may have been an akroterion (decoration on the corner of a roof) of a temple of Athena. It dates from the mid-seventh century B.C.E. It is notable that Syracuse was a colony of Corinth, not far from Argos and Tiryns, and where the myth seems to have originated. Photograph from Scala/Art Resource, N.Y.*



3.12 *The pediment of the temple of Artemis at Corcyra on Corfu. The triangular space above the columns and beneath the roof was dominated by an immense eight-foot figure of Medusa between two lions. To her left is a small figure of Chrysaor, while to her right there may have been a small figure of Pegasus, just as in the relief from Syracuse. The figure and temple date from the early sixth century B.C.E. Note the belt of snakes around her waist. Photograph from Erich Lessing/Art Resource, N.Y.*

At Corcyra on the island of Corfu was found a temple dedicated to Artemis. This dated from the sixth century B.C.E. On the pediment on the western end (the pediment is the triangular area atop the columns and below the roof) was a nine-foot-tall figure of a Gorgon. The figure is somewhat softened from that of Palermo, with more feminine features, but she still has the same arms-akimbo pose, kneeling on one knee. Although more human, she still possesses the notables eyes, prominent ears, and protruding tongue. To one side is a small human figure, almost certainly Chrysaor. There may have been a Pegasus on the other side—the pediment is not whole. Cinched about her waist like a belt are two snakes. She is flanked on either side by panthers.

On a temple at Selinus, near Palermo in Sicily, is another Medusa. She is on a *metope* (a carved panel on the side of the temple). Like the two figures described above, she has a classical Gorgon face, directed

out at the viewer. She kneels on one knee and holds a miniature Pegasus, but no Chrysaor (and in this case the relief is complete enough for us to see that he is not there). Her head is held by Perseus, who stands off to one side grasping her hair (no snakes on this Gorgon) with his left hand, while with his right he cuts off her head using a straight sword. Perseus faces forward, probably as much because all the metope figures face out as because he wants to avoid her petrifying glance. By his side stands Athena, impassively facing outward as well. For the artist to place the infant Pegasus in the arms of his mother Medusa before her head has been sliced off may seem to be a case of “jumping the gun,” but such telescoping of events in order to fit them into a single scene was a common practice. It is another example of the medium helping to shape the myth.



3.13 *Perseus decapitates Medusa as Athena looks on. A limestone metope (decorative panel) from Temple C at Silenus, near Palermo in modern-day Sicily. The stiff and formal positions of the figures give the impression of a very early work, but it is now thought that the crudeness of the depiction is due to the limitations of the artist in this Greek colony. The temple dates from the mid-sixth century B.C.E. Note the absence of a shield, and the obvious fact that Medusa is awake. Photograph from Art Resource, N.Y.*



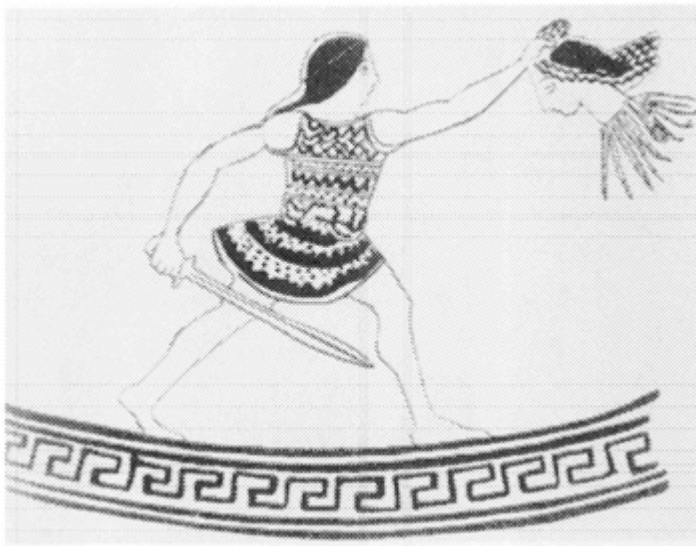
3.14 Gorgoneion (Gorgon head, without the body) from the handle of a bronze basin, circa 450 B.C.E. Courtesy of the Museum of Fine Arts, Boston, Otis Norcross Fund.



3.15 Gorgoneion from the base of a bronze handle of a hydria (water vessel). Sixth century B.C.E. Courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, David M. Robinson Fund.



3.16 Gorgoneion depicted at the base of the handle of a vase. Gorgoneia were often depicted near handles of vases, jugs, tripods, and chests. Courtesy of Musée du Louvre. Photograph by M. and P. Chuzeville.



3.17 An early example of the “beautiful” Gorgon. It is seen (unlike archaic Gorgons) in profile, and lacks the huge eyes, fangs, and protruding tongue of the archaic and Middle Gorgons. A. B. Cook claimed that this was the earliest known example of a beautiful Gorgon. It is from a red-figure hydria (water jar) from Kyrenaike, dating from about 475 B.C.E. Copied from A. B. Cook’s *Zeus: A Study in Ancient Religion*, vol. 3 (1940) by permission of Cambridge University Press.

From the sixth century B.C.E. onward, Gorgons were common figures on pottery. Perseus decapitating Medusa or Stheno and Euryale pursuing the fleeing Perseus were the most frequent depictions. Often the Gorgon could be found on a warrior's shield, filling it with her head. Sometimes the Gorgon's head would be placed at the bottom of a bowl, filling the round space at the exact center. Gorgon heads were also placed at the tops of jars, near the handles.

A. B. Cook places the start of the Beautiful Gorgon depictions at about 475 B.C.E., as shown on a red-figure water jar from Kyrenaike. This shows Perseus holding up the severed head of Medusa, which is seen in profile. The head shows none of the usual Gorgon features, but rather seems to be the head of a normal woman. *Apelike* (storage jar) from Polygnotos from about the same period shows Perseus about to cut the head off a sleeping, beautiful Medusa, observed by Athena. One of the most striking of the early Beautiful Medusas is the Rondanini Medusa, a life-sized face of Parian marble, now in Munich. It is believed to be a Roman copy of a Greek original dating from about 400 B.C.E. and is the first example that has wings attached to the head.

Commentators inevitably try to tie the Beautiful Medusa to Pindar's Twelfth Pythian Ode. This was a victory song (as were almost all of Pindar's odes), composed in honor of Midas of Akragas, the winner of a flute-playing competition in 490 B.C.E. According to ancient historians, Midas's flute broke during his performance, but he continued to play without the mouthpiece, winning against the odds. Pindar's ode recalls how Athena was said to have invented the art in imitation of the hissing of the serpents of the Gorgons. In passing, he mentions how Perseus darkened the eye of the Graiae and killed one-third of the Gorgons, taking as spoils of war the "broad-cheeked Medoisa's head." But this can also be translated as "beautiful-cheeked Medoisa," so some feel that Pindar started the ball rolling for the Beautiful Medusa. This, it seems to me, places too much importance on a single ambiguous line of poetry. The tendency toward a beautiful Medusa would have grown without this impetus. There are indications of it in several places before it blossomed in literature in Ovid's *Metamorphoses*.

The face of the Gorgon appeared on its own so often that it has its own special name—the *Gorgoneion*. The staring, daunting face of the Gorgon that is the Gorgoneion shows up in many circumstances where it is clearly supposed to be a warning. For example, it has been placed on the doors of ovens and kilns. One of the most common uses of the face is on *antefixes*, the terra-cotta tiles that line the edges of Greek and Roman roofs (see [Chapter 9](#)). Many people feel that the row of scowling Gorgon faces was intended to scare away evil influences.

Another common use was as an engraving on gems and cameos, where it was felt that the scary features worked in the bearer's favor. The gems with Gorgon faces were thus lucky pieces. Perhaps it was for this reason that the Gorgoneion appeared on the coins of many Greek cities and colonies. A Gorgon face used as a talisman to ward off evil is called an *apotropaic* device. (The Greek word *apotropaios* means "to turn away.")

Another place the Gorgoneion appears is on the *aegis* of Athena. What was the aegis? Even the ancient artists seemed somewhat unsure. At times it was a sort of cloak, while at other times it was Athena's shield. Perseus gave the Gorgon's head to Athena, and she placed it on her aegis, so it would seem that all we would need to do to settle the question was to look for the item with the Gorgon's head. But sometimes this is her cloak, and sometimes the shield. Sometimes it is both cloak and shield, each bearing a Gorgon head. To make matters more confusing, the aegis was originally said to belong to Zeus. But he is never shown with either a Gorgon-emblazoned shield or cloak.



3.18 Ceramic model of foot with Gorgoneion. © The British Museum.



3.19 (top left), 3.20 (top right), 3.21 (bottom left), 3.22 (bottom right), *Ancient Greek and Roman coins with Gorgoneia*. © *The British Museum*.

So what was the aegis? Professor William Ridgeway of Cambridge University thought he had the answer, as expounded in 1900 at a meeting of the Hellenic Society. The aegis, he declared, was the skin of an animal, probably a goat, with the head still attached. A hole was cut into the back, through which the wearer placed his own head. The head of the goat then hung down over the chest, its own head forming the Gorgon face. Ridgeway displayed an African goatskin, worn in this fashion by the Dyaks, as an example.

Some accepted this explanation. There seemed to be some support for it in the myth that Zeus fashioned the aegis from the skin of Amalthea, the goat that suckled him (and whose horn became the cornucopia—the inexhaustible horn of plenty). Besides, *aegis* closely resembles *aix*, meaning “goat.” In addition, the theory has the advantage of being promulgated by Herodotus, who said that the Libyan women wore such a tasseled goatskin, and that this was the origin of Athena’s aegis. One story has it that Athena fought a fire-breathing monster named Aegis, killed it, skinned it, and wore its tough skin as protection ever after—but the one who tells this story is the ever-untrustworthy Dionysius Skytobrachion. And he is the only one to tell it (aside from Diodorus Siculus, who quotes him). Somewhat similar stories, however, are told by Apollodorus, who says that Athena skinned a scaly giant named Pallas, and Cicero, who says that Pallas was the father of Athena and tried to rape her.

In fact, the aegis as represented in art never looks like a goatskin, apart from a single example—an Etruscan mirror dating from the fourth century B.C.E. that shows Athena with a goatskin draped over her. The head and front hooves hang down visibly—and well below her chest. Furthermore, in addition to the goat head there is a perfect Gorgon's head visible upon her chest, complete with protruding tongue. That detail clearly wouldn't be necessary if the goat head were the Gorgon head of the aegis. Archaeologists have generally been skeptical of Ridgeway's assertion. "[There is] no proof that a goat-skin was ever 'the ordinary dress' at Athens," A. B. Cook noted dryly.



3.23 *Hercules choosing between Virtue and Vice (Virtue represented by Athena, who is identified by “Menrfa” = Minerva on her gown), a fourth-century Etruscan mirror found at Tarquinii. Athena’s aegis is drawn as a goat-skin, as Ridgeway has suggested, but note that there is a Gorgoneion in addition to the goat’s head. Copied from A. B. Cook’s Zeus: A Study in Ancient Religion, vol. 3 (1940) by permission of Cambridge University Press.*



3.24 *Terra-cotta image of the aegis from the Tomb of the Erotes, fourth century B.C.E. Eretria in Greece. This palm-sized lenticular image might be intended to represent a shield. Note the wings behind the head of Medusa and the face that now looks very human. This marks this as a late-style Gorgon. The surface of the aegis is covered with feather-like or scale-like patterning. Courtesy of the Museum of Fine Arts, Boston, Catharine Page Perkins Fund.*



3.25 *Terra-cotta image of the aegis from the Tomb of the Erotes, fourth*

century B.C.E. Eretria in Greece. This image is similar to figure 3.24, except that the aegis is round, rather than lenticular. Courtesy of the Museum of Fine Arts, Boston, Catharine Page Perkins Fund.



3.26 Set of miniature shields from the Tomb of the Erotes in Eretria, Greece. Fourth century B.C.E. Note that seven of these are aegies. Courtesy of the Museum of Fine Arts, Boston, Catharine Page Perkins Fund.

As depicted by artists, the aegis was either a smooth breastplate with a prominent (though small) Gorgon head in the center, or a shield with a Gorgon head at the center. The surface of the shield was covered with small texturing that sometimes resembled scales, sometimes feathers, sometimes ambiguous items that could be either. Cook thinks this a holdover from the two animals most closely associated with Athena—the owl and the snake.

The aegis is identified in *The Iliad* with the thundercloud of Zeus. Since the aegis belonged to Zeus, god of the sky, thunder, and lightning, it is reasonable that his shield should be the clouds themselves. *Aisso* means “to rush or move violently,” like the storm, and many feel this formed the basis for the aegis. Following this line of reasoning, German mythologists saw the lightning in the “flashing eyes” of the Gorgon, and the thunder as its roaring (represented by the

protruding tongue).

If the ancient Greek Gorgon didn't have snakes in place of hair, then where did the idea come from? When did Medusa receive her snakes? Throughout classical times, the general picture of the Gorgon didn't include snaky hair, although almost from the start snakes were among its attributes, often entwined in its hair. I've already pointed out some of the early artwork that supports this interpretation, but there is literary evidence as well. One myth of Hercules (which we will refer to at greater length in [Chapter 7](#)) relates that when he was at the city of Tegea in Attica, Hercules received from Athena a bronze jar containing a lock of the Gorgon's hair. If this were held up three times, an enemy who beheld it would flee. The story is reported by both Apollodorus and Pausanias, and Tegean coins show Athena handing over the lock of hair. So the Gorgons, by this argument, definitely had hair. At the same time, Pindar's Twelfth Pythian Ode notes how Athena invented the flute in imitation of the "deathly dirge" of the Gorgon. Everyone has taken this to mean the hissing of the Gorgon's serpents.

Some of the earliest Gorgons had snakes wrapped around their waists (Corfu) or around their heads and under their chins (Eleusis, Corinth). But these Gorgons had hair as well as snakes. From the fourth century B.C.E. onward, snakes began to be placed around the periphery of the Gorgon's head—sometimes just above the head, behind the hair, but sometimes encircling the entire head. These snakes would be bent into S-shapes, arising unnaturally from the edges of the head. The use of this convention extended into Roman times and seems to be a way of indicating the snake-associated nature of the Gorgon. Whether it was intended to indicate actual snakes in the hair of the Gorgon, that is what it eventually came to mean. The Rondanini Medusa has snakes entwined in her hair.

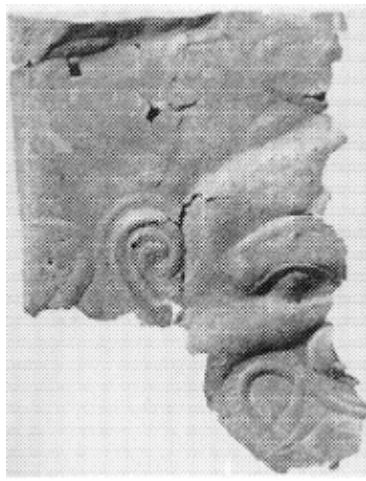
Snakes that have totally supplanted the hair of the Gorgon seem to appear only on coins, possibly because there really isn't very much room on a coin to fit in both snakes and hair. The bulk of Gorgons on Greek coins have only hair. But a silver drachma of Abydos dating from 450–480 B.C.E. has only snakes around its head, while a silver drachma of Apollonia ad Rhynchacum in Mysia, from around 300–400 B.C.E., looks very similar. Coins from Tarsus in present-day Turkey, issued about 120 C.E., depict Perseus (held to be the founder of Tarsus, as well, by that date) holding the head of the Gorgon, her scalp covered with snakes. A bronze coin issued by Seleukos in Nikator in 312–280 B.C.E. shows very natural-looking snakes covering a Beautiful-type Gorgon head, as does a Roman denarius issued by L. Cossutius Sabula about 54 B.C.E. Nevertheless, in larger works of art, the snakes clearly remained supplemental to ordinary hair throughout Greek and

Roman times. Only in an occasional literary description and on coins did classical Gorgons have snakes in place of hair. It was not until the Renaissance that Gorgons lost their hair altogether.

The early Gorgon reliefs listed above often showed Medusa together with diminutive figures of Chrysaor and/or Pegasus, indicating that she was their mother. But these Medusas conspicuously retained their heads, so the scenes are really more thematic than representative. By the fifth century B.C.E., illustrations of the myth were becoming more “realistic,” as if depicting a frozen moment from a play. The birth of Chrysaor and Pegasus from the neck of Medusa was not an easy thing to depict, and illustrations of that event are not common. A few artists did attempt to show it, however. Maybe they were attracted by the outré subject matter and the challenge to somehow fit everything in.



3.27 *Perseus decapitates Medusa as Hermes looks on.* This drawing is based on an Attic black-figure vase now in the British Museum. It is signed “Amasis,” and dates from the middle of the sixth century B.C.E. As in some early depictions, Hermes, rather than Athena, is the helper of Perseus, and the two dress alike. Medusa, again, is awake during the attack. Notice that she does not have snakes in place of her hair, but that her head is surrounded by a stylized fringe of coiled snakes. Photograph reprinted from Jocelyn M. Woodward’s *Perseus: A Study in Greek Art and Legend* (1937), courtesy of Cambridge University Press.



3.28 Fragmentary bronze relief with Gorgoneion, 550–500 B.C.E. A fine example of an archaic Gorgon. Note the fringe of curled snakes around the edge of the head, not in place of the hair. Courtesy of the Museum of Fine Arts, Boston, Henry Lillie Pierce Fund.



3.29 Black vase with large Gorgoneion at neck. © The British Museum.

A sarcophagus now at Cyprus, an amphora now in Munich, and an Etruscan gem carving all try to show small figures of a man and a horse literally emerging from the stump of the neck. A terra-cotta relief from Melos, now in the British Museum, shows only Chrysaor

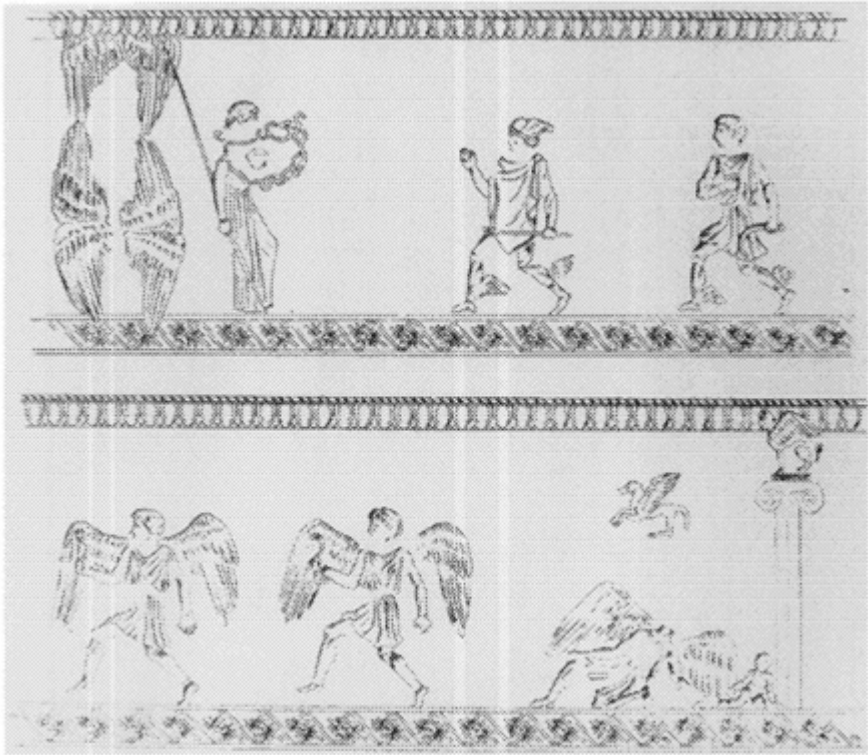
springing from the neck. In all of these cases, Chrysaor is a fully grown, if diminutive, figure. Almost no one tries to show him as a baby. In the last-named image, Perseus uncharacteristically rides a horse. This has led some commentators to brand the horse Pegasus. In view of the fact that there were attempts even in the ancient world to scramble the myths and have Perseus obtain Pegasus before killing Medusa, this is possible. But since Hesiod (and Apollodorus, who follows him) are our only sources for the odd birth of Chrysaor, and they say that Pegasus was born at the same time, this seems unlikely. As I will show in [Chapter 7](#), persistent attempts were made to associate horses with Perseus (and his parallels), so it was not really unusual for the Melos relief to put him on a horse.

An Etruscan vase (now in Florence) shows a full-grown Pegasus traveling away from the decapitated Medusa. Another, wingless horse appears to be leaving the neck as well. Did this painter misunderstand Hesiod? Or is this some odd local variant?

A red-figure vase from Nola shows Perseus fleeing with Mercury and Athena. (Athena is recognizable by her aegis, which already has a Gorgoneion on it, despite the fact that Perseus is carrying a laden kibisis, presumably with the head of Medusa in it.) He is pursued by Stheno and Euryale, the two living Gorgons. Slumped at the base of a column is the headless Medusa. Above her flies the winged Pegasus, and near her rests Chrysaor, looking more baby like than in any other depiction. Both figures are still small, befitting newborns, but at least they are spared the grotesque position of being in Medusa's neck.



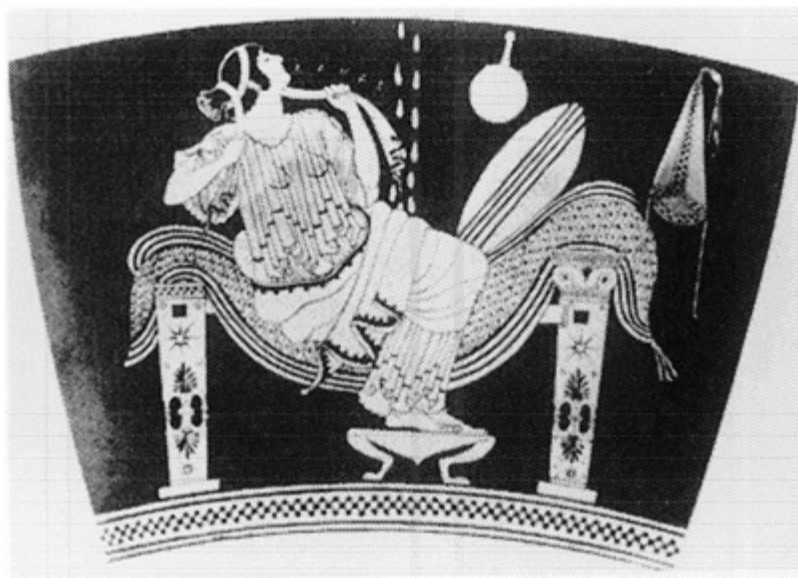
3.30 Pegasus and Chrysaor being born from the neck of Medusa. A drawing of an Etruscan scarab. Reproduced from A. B. Cook's *Zeus: A Study in Ancient Religion* by permission of Cambridge University Press.



3.31 (top), 3.32 (bottom) Perseus flees from the Gorgons. He holds his harpe and the kibisis, and is preceded by Hermes as they run toward Athena. Athena can be recognized by her snake-fringed aegis, which,

paradoxically, already contains the head of the Gorgon. On the other side of the vase Stheno and Euryale pursue, while the headless body of Medusa slumps against a column. Nearby are miniature figures of Pegasus and Chrysaor, who have evidently just been born from her neck. The drawing appears on a black-figure vase from Nola, now at the Museum of Fine Arts in Boston. Sketch reproduced from A. B. Cook's Zeus: A Study in Ancient Religion by permission of Cambridge University Press. Photograph courtesy of the Museum of Fine Arts, Boston, Henry Lillie Pierce Fund.

Other elements of the myth of Perseus were also popular artistic subjects (although none matches the Gorgoneion, the Gorgon's head, for sheer volume). These other elements were first depicted starting in the fifth century B.C.E., after the earliest Gorgons and Gorgon-killings. A red-figure Attic kalyx-krater, dating from the early fifth century and now in St. Petersburg, shows Zeus descending upon Danae in the form of a shower of gold—actually two parallel streams of drops—as she reclines on an ornately carved bed. On the opposite side of the amphora, Danae and a young Perseus are being shut up in the chest by Acrisius, prior to being thrown into the sea. A slightly later version of the scene, displayed now in Oxford, survives only as a fragment that shows Danae in the chest, with the staff and part of the robe of Acrisius visible to one side.



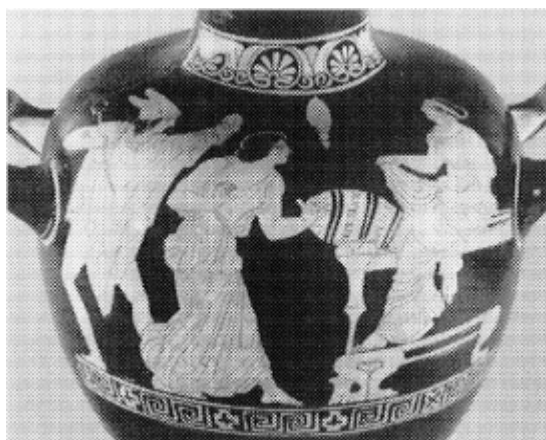


3.33 (top), 3.34 (bottom) *Danae being impregnated by Zeus in the form of a shower of gold, and Danae and Perseus being shut up in the chest by Acrisius and a Carpenter. Both illustrations from an Attic red-figure Kalyx Krater now in St. Petersburg. Fifth century B.C.E. Reprinted from Jocelyn M. Woodward's Perseus: A Study in Greek Art and Legend (1937), courtesy of Cambridge University Press.*

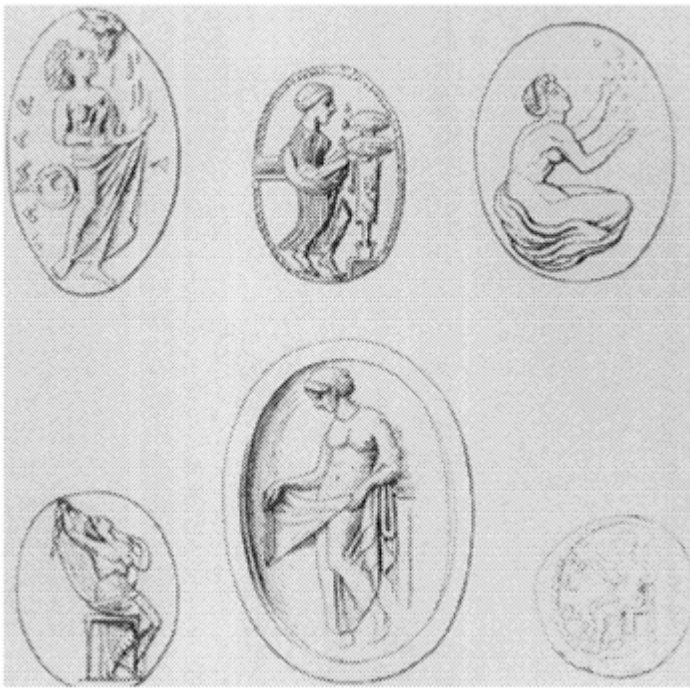
Depictions of the Graiae are rare. The most famous is probably on a late-fifth-century red-figured *pyxis* (a small, squat container often used for ointments) now at the National Museum in Athens. Perseus reclines between two of the Graiae, his hand reaching upward toward the outstretched hand of one of the maiden sisters. In that hand she has a rather oversized eye, which another of the Graiae is reaching for. Perseus already has his helmet, *harpe*, and winged sandals, as well as two spears. Nearby are Hermes, Athena, Phorkys, and Poseidon. The Graiae are depicted as neither old nor grotesque. In fact, in none of the known or suggested representations of them do the Graiae appear to be monstrous in any way.



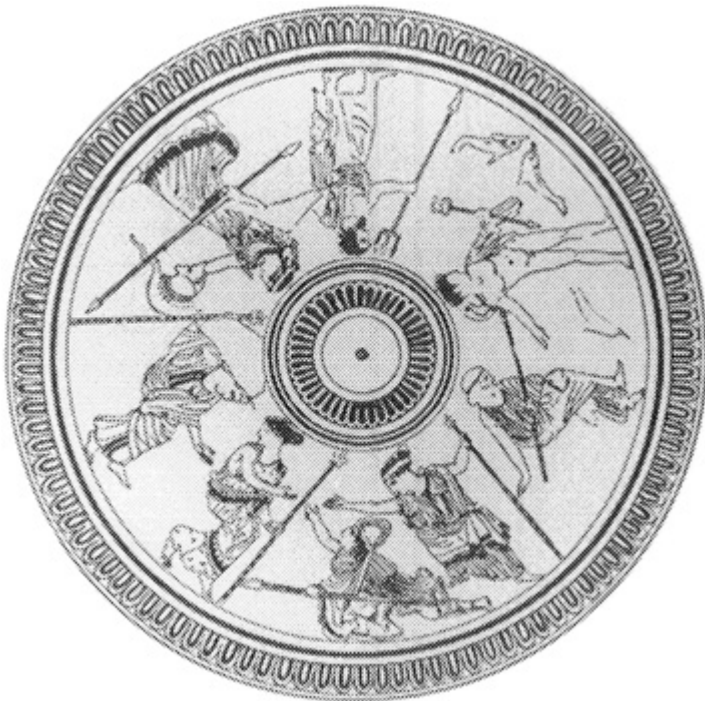
3.35 Danae and Perseus being sealed in the chest by Acrisius and the Carpenter. Red-figure Attic hydria (water vessel) from Gela, circa 490 B.C.E. Courtesy of the Museum of Fine Arts, Boston, Francis Bartlett Fund.



3.36 Danae being impregnated by Zeus in the form of a golden shower. Attic red-figure vase, circa 430 B.C.E. Courtesy of the Museum of Fine Arts, Boston, Otis Norcross Fund.



3.37 *Figures of Danae being impregnated as depicted on carved gems from the fourth and fifth century B.C.E. and a coin from the time of Hadrian. Danae is identified by her name. Copied from A. B. Cook's Zeus: A Study in Ancient Religion, vol. 3 (1940) by permission of Cambridge University Press.*

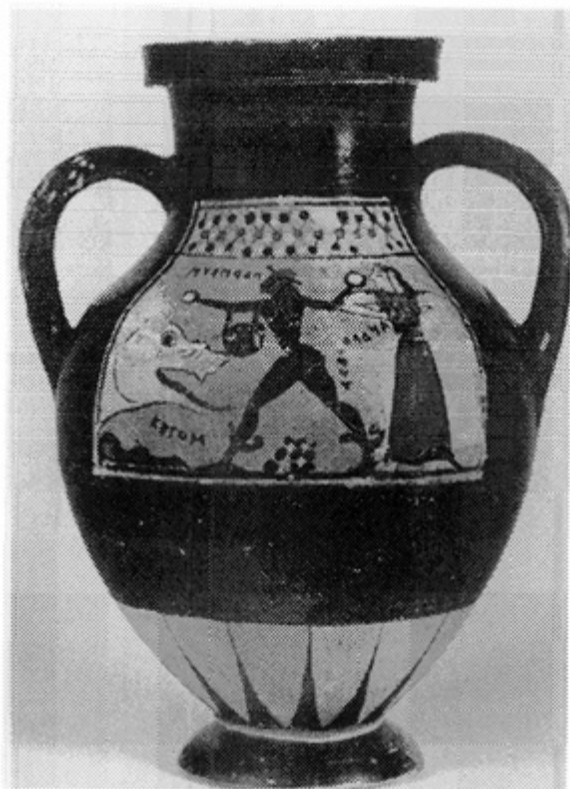


3.38 *Perseus steals the eye of the Graiae on the lid of an Attic red-figure pyxis (small box for trinkets or ointment), dating from the fifth century B.C.E., now in the National Museum in Athens. Perseus, holding two spears, creeps up as one of the Graiae passes the eye to the other two and tries to intercept it. Note that the Graiae are depicted with no eyes in their sockets, but otherwise look like attractive women, neither old nor swan-like. Athena and Hermes stand by, as do Poseidon (with his dolphins) and an old man who some identify as Phorkys, the father of the Graiae. Depictions of the Graiae are very rare. Drawing reprinted from Jocelyn M. Woodward's *Perseus: A Study in Greek Art and Legend* (1937), courtesy of Cambridge University Press.*

Much more popular are scenes showing Perseus rescuing Andromeda. These scenes have, in fact, evolved through the years. The earliest such figure is surprisingly old, coming from a black-figure amphora of the second quarter of the sixth century B.C.E. Appropriately, it is Corinthian, although it was found in an Etruscan tomb. A nearly naked Perseus stands in the center, winged sandals on his feet, hat on his head, and kibisis over one arm. He is throwing stones at the sea monster, who is shown only as a head. That head, somewhat wolflike, with a long tongue, is as big as Perseus. Andromeda stands on his other side. Significantly, she is not shackled to a rock—she has her hands full of stones, too. We can be sure of who

the characters are, because their names are written beside them, using the odd Corinthian letters—the *S* looks like an *M*, the *E* like a *B*, and the *M* like a caret. With that prompting, we can read KETOS, PERSEUS, and ANDROMEDA, even though the last two are written mirror-image. This image is unique. Nothing quite like it exists elsewhere.

Later images, it has been suggested, were strongly influenced by the plays of Phrynichus, Sophocles, Euripides, and Aristophanes. We know more about Euripides' play, first produced in 412 B.C.E., than the others, even though the full text has not survived. Although existing fragments and references don't say anything about Andromeda's being chained to a rock as a sacrifice (the earliest references to that date from the first century B.C.E.), she is usually depicted that way after Euripides' time. Perseus is shown descending toward her or fighting Ketos. In Roman times, he is shown freeing Andromeda from the rock, with the dead or dying Ketos in the background.



3.39 Perseus fights Ketos, the sea monster, while Andromeda looks on. A Corinthian black-figure amphora dating from the sixth century B.C.E. This is the earliest illustration we have of this scene. It differs from the later depictions in that Andromeda is not bound to a rock, and in the way an almost naked Perseus fights Ketos by throwing rocks at the monster.

Perseus carries the kibisis on one arm, winged sandals on his feet, and a Hermes-like cap. Ketos looks wolf-like. Reprinted from Jocelyn M. Woodward's Perseus: A Study in Greek Art and Legend (1937), courtesy of Cambridge University Press.



3.40 *Perseus rescues Andromeda. A wall painting from Pompeii, now in the National Museum in Naples. First century C.E. Many feel that this painting is a copy of a fourth-century original by the fourth-century B.C.E. Athenian painter Nikias, mentioned by Pliny. But the style and depiction clearly are of late style. The emphasis is on the figures of Perseus and Andromeda. The head of Medusa is incredibly tiny and very human. Perseus's sword is neither straight nor curved, but has acquired the hybrid form of the falcion. The sea monster Keto expires almost off-stage in the background. Photograph courtesy of Alinari/Art Resource, N.Y.*

Finally, Perseus's victorious return home is depicted on a bell krater in Bologna. This shows him holding up the Gorgon's head before the evil Polydektes, turning him into stone. Perseus gave the Gorgoneion to Athena, and on some vases from southern Italy she is shown studying the head by its reflection in a pool of water (rather than in a shield).

PARALLELS FROM AROUND THE WORLD

In order seriously to substantiate this interpretation it would be necessary to investigate the origin of this isolated symbol of horror in Greek mythology as well as parallels in other mythologies.

—Sigmund Freud,
Medusa's Head, 1922

STRIKING PARALLELS TO THE Greek Gorgon can be found in mythologies around the world. Any serious investigation of the origin of the Gorgon has to examine these figures as well. Before we take a look, however, it would be good to ask what constitutes a Gorgon parallel.

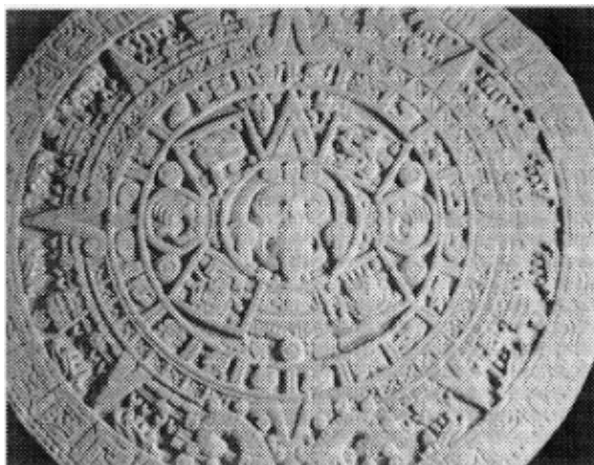
No single definition precisely fits all the different examples. (I am tempted to say that I know a parallel when I see one.) A true parallel should have a number of features in common with the Gorgon myth, and few with anything else (aside from another Gorgon parallel, of course). To place one of the best examples first, consider the face in the center of the Aztec Calendar Stone. This is the face of the sun, usually taken to be the deity Tonatiuh, although more recently it has been suggested that the face is that of Xochipilli-Piltzintecuhtli.¹

The figure is a frontal depiction of a wide-eyed, staring face with a broad nose. The forehead is marked with lines, and the hair is carefully and stylistically portrayed. The mouth is wide open in a painful grimace, from which the tongue protrudes grotesquely. The head even wears earrings, as do many Gorgoneia.

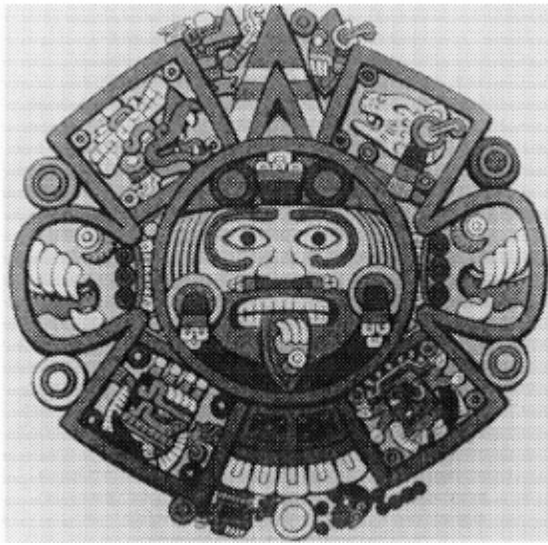
The previous paragraph gives a perfect description of an Archaic Gorgon. About all that's missing are the fangs and the occasional beard. The head on the Aztec Calendar Stone is, in fact, a closer match to the Archaic Gorgon than are later Roman Gorgons. It is a closer match than the Kirtimukha of India (to which many readily acknowledge the Gorgon to be related), and it more closely resembles the Archaic Gorgon than does the face of the ancient Babylonian demon Humbaba (which many believe to be the true ancestor of the Gorgon).

Yet how can this be? The Archaic Gorgon flourished in the seventh to fifth centuries B.C.E. in Greece and gradually metamorphosed into the sentimental "Beautiful" type beloved of the Romans. The Aztec

Calendar Stone was dedicated in 1479 C.E. in what is today Mexico City. (We know the date of its dedication because it is carved on the stone itself, appropriately enough.) The two images are separated by two thousand years and thirteen thousand miles. There is no obvious link between them (although that has not stopped people from speculating about such a link), yet there they undeniably are. Without a doubt, the face of the Aztec sun is an artistic parallel to the Gorgon.



4.1 *The Cuauhxicalli (“Eagle’s Bowl”) found at Mexico City in 1760. Usually called the Aztec Calendar Stone, it was dedicated in 1479 C.E., and is decorated with images depicting the days and eras. The face in the center is the sun, although exactly which deity remains unclear. It is usually taken to be Tonatiuh, but it has been suggested that it might be Xochipilli-Piltzintecuhtli. With its large, staring eyes, its gritted teeth and protruding tongue, its broad, lined face and stylized hair, this resembles an archaic Gorgon to an astonishing degree. It is even closer to the archaic Greek Gorgon than later Greek or Roman examples. Michel Zabe/Art Resource, N.Y.*



4.2 *Sketch of the face at the center of the Aztec Calendar Stone, from Cecelia F. Klein's The Face of the Earth. Courtesy of the Garland Publishing.*

On the other hand, there are cases where the resemblance is less clear. Mythologist A. B. Cook said that the earliest example of a Gorgon he knew of was on a Minoan seal in his own collection, dating from about 1800 B.C.E. The seal depicted a front view of a broad face. Yet it is claiming a lot to proclaim this a "Gorgon." Minoan culture is distinct from Greek culture in both time and space. And we know of no artifact that bridges the temporal or stylistic gap between Cook's sole example and the earliest Corinthian Gorgoneia. More to the point, I doubt if Cook's seal even is a Gorgon parallel. It lacks the broad mouth, fangs, and protruding tongue, and the eyes are not emphasized as they are in the Gorgon and its legitimate parallels elsewhere. I hesitate to quarrel with a scholar of Cook's caliber, yet I believe he is wrong on this one.²

As another example, consider the Babylonian figures found at Tell Asmar near Baghdad. No one claims that these are parallels to the Gorgons, but I bring them up because they have one important feature in common with the Gorgon—their huge, staring, spooky eyes. The eyes are enormous relative to the rest of the head, and the pupils look odd because they are actually openings cut into the figure. There is something compelling and eerie about these idols, which affect one in the same way that the staring eyes of Archaic Gorgons do. Yet clearly they are not Gorgons. These figures lack almost all the other aspects of the Gorgon—wide-open mouth, tongue, broad nose, emphasis on the

frontal aspect.

Not every Gorgon parallel described below will have all the features of the Gorgon, but most will, I think, be similar enough in appearance, condition, or mythology to warrant identifying them as legitimate parallels.

Parallels in Greece and Rome

Phobos and Eurynomos

Looking at those early, bearded Gorgon heads, one has to wonder whether the artists intended them to represent one of the three sisters Medusa, Stheno, and Euryale. They clearly aren't female, and there's no clue as to the type of body they should have. There's no indication that there should be three of them, or of how they fit into mythology. There is no suggestion of Perseus or of decapitation. As I've pointed out, many scholars believe that the idea of the Gorgon's head originated first, and that only later did a body (and a mythology) become attached to it. Thus the head of the Monster from Hell in Homer's *Odyssey* and those early bodiless Gorgoneia led to the myth of Perseus, which explained how that head came to be separated from its body. But what if some of the heads were originally intended to represent some figure other than a Gorgon? What if the original artists had something else in mind?

One possibility is suggested by the face of Phobos. Phobos was one of the two sons of Ares, the god of war. His name means "fear," and that of his brother, Deimos, means "panic." The names themselves seem little more than allegorical—of course fear and panic would be the children of war. Bolstering this notion that the names don't really mean much is the fact that Phobos and Deimos rarely show up in either literature or art, and they have no myths associated with them. There are no images generally recognized as depictions of them.

So why should I think that Phobos is one inspiration for the face of the Gorgon? The theory rests largely on two literary passages. One of these appears in "The Shield of Hercules" and describes the figure at the very center of the shield. No visual representation of this shield survives, but the author describes it in terms that are vivid enough: "In the center was Fear (Phobos) worked in adamant, unspeakable, staring backwards with eyes that glowed with fire. His mouth was full of teeth in a white row, fearful and daunting, and upon his grim brow hovered frightful Strife."³ The description is a perfect one for the Archaic Gorgon. The unknown author of "The Shield of Hercules" cannot be mistaking the face of the Gorgon for that of Fear, since he describes the Gorgons themselves a little later—but note the

provocative last lines:

And after him [Perseus] rushed the Gorgons, unapproachable and unspeakable, longing to seize him: as they trod upon the pale adamant, the shield rang sharp and clear with a loud clanging. Two serpents hung down at their girdles with heads curved forward: their tongues were flickering, and their eyes glaring fiercely. And upon the awful heads of the Gorgons great Fear (Phobos) was quaking.⁴

Could this mean that the face of the Gorgon was identical to that of Fear? Or does it merely mean that the face of Fear occupied the center of the shield?

In the fifth book of *The Iliad*, Homer describes the aegis of Athena:

... All around
Upon it in a garland Rout was figured,
Enmity, Force, and Chase that chills the
blood,
concentered on the Gorgon's head, reptilian
seething Fear (Phobos)—a portent of the
stormking.⁵

Once again the face of the Gorgon is compared to Fear itself, suggesting that the representations of the two were identical.

These are the only passages I have found that suggest an appearance for Phobos, and they do not seem to have been copied in any other texts or by any other artists.

Another literary description of a lost artistic rendering is also provocative. Pausanias, writing about the central Grecian city of Delphi (home of the famous oracle), describes the building called the Lesche (“clubhouse”), where the Delphians met to tell old tales. Appropriately, the walls were painted with scenes from the works of Homer, rendered by an artist named Polygnotos.

In a scene set in Hades is a figure whom Pausanias says the locals called Eurynomos. He is described as a demonic spirit of Hades who eats the flesh of the dead, leaving only the bones. Pausanias notes that Homer’s works did not describe such a demon. Nevertheless, for the benefit of his readers, Pausanias describes the figure—it was blue-black in color (“like the flies that settle on meat,” noted Pausanias in a particularly graphic simile), and “he shows his teeth.” Admittedly, this isn’t much on which to base an identification of Eurynomos as an alternative Gorgon-head, but I note that the passage being illustrated here deals with Odysseus’s descent into Hades, which is precisely the

circumstance in which he was threatened with the head of the Gorgon in Homer—so perhaps the Delphic Eurynomos is simply the mainland garb of the Argive/Corinthian Gorgon.

***The Graiae, the Fates, the Furies,
the Praxidikae, and Hecate***

Greek mythology abounds in triple goddesses. Some see an underlying reason for this—the mystic significance of the number three, for instance, or an embodiment of the Three Ages of Woman (Maiden, Mother, Crone). Regardless of the true reason, the mere fact that all these groups are trios gives them an apparent resemblance to the three Gorgons. Even if there had been no resemblance originally, I think that the numerical connection would have prompted an assimilation of features. In any case, there clearly are similarities.

I have already introduced the Graiae, also called the Phorkides after their father, Phorkys. They are the closest parallel to the Gorgons, even having the same parents. Hesiod and Ovid mention only two Graiae, although Pherekydes and those who follow him make them three. They are named Pemphredo (“wasp”), Enyo (“warlike”), and Deino (“terrible”), names that don’t seem suited to the gentle and beautiful women depicted in art. They might be more applicable if, as I suggested earlier, the Graiae were originally a variation on the Gorgons, monsters whom Perseus was sent to defeat by stealing their eye and/or tooth, just as, in the more familiar version, he was sent to take the head of Medusa. The two versions could have coalesced to give us the story as we know it today.

The Fates (Moerae) are probably more familiar to modern audiences than the other triple goddesses. They were popular subjects in art from the Renaissance onward. The symbolism of Clotho, who spins the thread of life, Lachesis, who measures its length, and Atropos, who cuts it off, is obvious, immediate, and powerful, making it perhaps inevitable that the three would become a popular subject.

The Fates are usually depicted as three serene, white-robed women, super-beings who go calmly about the thankless business of determining how long people should live. Why, then, should I include them here? There is evidence that this gentle picture of the Fates, like that of the equally genteel Graiae, may be a later modification of a more savage original trio. “The Shield of Hercules,” for example, presents a graphically different picture of the three:

the dusky Fates, gnashing their white
fangs,

lowering, grim, bloody, and
unapproachable,
struggled for those who were falling, for
they
all were longing to drink dark blood. . . .
Clotho and
Lachesis were over them and Atropos less
tall than
they, a goddess of no great frame, yet
superior
to the others and the eldest of them. And
they all
made a fierce fight over one poor wretch,
glaring
evilily at one another with furious eyes and
fighting
equally with claws and hands.⁶

The Erinyes, also known as the Eumenides, are perhaps better known to us as the Furies. The first name, meaning “the angry ones,” is the more accurate. Eumenides, which means “kindly ones,” was a form used to avoid upsetting the vengeful creatures, who punished murderers and oath-breakers, with their most famous appearance coming in Aeschylus’ play *The Eumenides*. The number of Furies varies from source to source in early records; Virgil is the first to number them at three and to name them. Apollodorus follows him in this. The names given are Tisiphone (“vengeful destruction”), Alecto (“unnameable”), and Megaera (“grudge”).

Jane Harrison claimed, back in 1903, that Aeschylus was the one responsible for giving a concrete form to the Erinyes, who originally seem to have been a vague manifestation of conscience. Aeschylus’ plays *The Libation Bearers* and *The Eumenides* (first presented in 408 B.C.E.), which dealt with the aftermath of Orestes’ murder of his mother Clytemnestra and her lover Aegisthus (who had, in turn, murdered Orestes’ father Agamemnon), required that the avenging creatures appear onstage. The descriptions in his works are somewhat contradictory:

...they come like gorgons, they wear robes
of black,
and are wreathed in a tangle of snakes.⁷

... I think I call them rather

gorgons, only not gorgons either, since
their shape is not the same....
they are black and utterly repulsive, and
they snore
with breath that drives one back. From
their eyes
drips the foul ooze....⁸

Vase paintings thought to be inspired by these scenes somewhat clarify the confusion. In them, the Furies are depicted as not-unattractive, occasionally winged women. True to the description, they sometimes have snakes wrapped around them. Harrison thought the foul ooze must be identical to the power that caused the Gorgons to petrify men, but I shall present a different interpretation in [Chapter 10](#).

Euripides, in his own play *Orestes*, presented fifty years after those of Aeschylus, doesn't describe the Furies, noting only that they had wings. But Virgil, in *The Aeneid*, draws a different and dramatic picture. His Furies live in Hades, like Homer's Gorgon, and look more like the modern conception of the Gorgon:

...From the dark underworld,
Home of the Furies,
she [Juno, queen of the gods] aroused
Alecto....

....
Even her father Pluto hates this figure,
Even her hellish sisters, for her myriad
Faces, for her savage looks, her head Alive
and black with snakes...

....
Without delay Alecto,
Dripping venom deadly as the Gorgon's,
Passed into Latium ...

....
Now the goddess
Plucked one of the snakes, her gloomy
tresses,
And tossed it at the woman.⁹

No one seems to have developed Virgil's image of the Furies, either in art or literature. The image of a Gorgonlike Fury is to be found only on rare occasions.¹⁰

The Praxidikae are not at all well known today. No myths about them survive, and they are not even mentioned in most books on mythology. But they were important enough to rate more than one shrine at Haliartos in Boeotia, just above the Gulf of Corinth. The Haliartians called the Praxidikae the Workers of Right. Their name seems to imply that they served the same function as the Furies, although they evidently didn't have as good a press agent. Even Pausanias, from whom we learn these facts, admitted that he was unable to find examples of people who had suffered their vengeance.

From other sources we glean a little more. Some speak of a single goddess, Praxidike, but according to others there were three, named Alkomenia, Thelxinia, and Aulis. Perhaps it is significant that Alalkomenia was the name of a small village near Haliartos.

The Praxidikae were represented by heads, although no examples seem to have survived. Animals were beheaded as sacrifices to them, a circumstance that increases the similarity to Gorgons and (as we shall see) to other Gorgon parallels.

Beyond these few clues, there really is no definite information about the Praxidikae. But there is an odd little work by the third-century B.C.E. poet Theocritus of Syracuse. His Fifteenth Idyll, entitled "The Women at the Adonis Festival," is a somewhat comic look at a pair of housewives attending a religious fair in the city of Alexandria, gossiping and commenting on the sights. What makes this dialogue interesting is the names of the housewives. One is named Gorgo. Surprisingly enough, despite its undeniable mythological association with a horrible monster, Gorgo was a common female name. There are several mythological Gorgos who are not monsters. Plenty of inscriptions also bear the name, testifying that it was in use as a real, everyday appellation. So it's not surprising, really, that one of Theocritus' housewives bears that name. What is surprising is that her companion is named Praxinoa, which is usually translated as something like "busy mind," but which also definitely evokes the name Praxidike as well. Can it be purely coincidental that Theocritus has named his heroines after mythical figures that are represented by faces on a wall?

Consider also Praxinoa's line: "Ever since I was a little girl, two things have frightened me more than anything else, a horrid slimy snake and a horse."¹¹ This line evokes both the snakes that accompanied the Gorgons (even if they didn't substitute for hair) and Pegasus, born from Medusa's neck.

The goddess Hecate originally didn't have much in common with the Gorgon. She was the protectress of crossroads. A "crossroads" in this connection might be a place where three roads met (or, more

accurately, where a minor road dead-ended into a longer, continuing road), so figures of Hecate had three faces, and she was called Hecate Trevia—Hecate of the Three Roads. She gradually became connected with darkness and magic. By Roman times she was sometimes described (although, as far as I am aware, never portrayed in art) with a Gorgon's head.

Parallels Elsewhere

Egypt

When mythologists searched about for candidates from which the Gorgon might be derived, they quickly seized upon the Egyptian deity Bes. Bes is surely one of the strangest figures in the Egyptian pantheon—which is already crammed full of such peculiar characters as the ox-headed Khnum, the jackal-headed Anubis, the cow-horned Hathor, and the falcon-headed Horus. These other deities, along with most Egyptian figures, are generally represented in profile, their bodies stiffly posed. From the start, however, Bes has been shown looking straight out of the stone or the papyrus at the viewer. He is practically the only Egyptian figure to be portrayed *en face*—a feature he shares with the full-face Gorgon. Other shared features are the large, staring eyes, broad nose, beard, and protruding tongue. Also, like the Gorgon, Bes is often represented as a bodiless head.

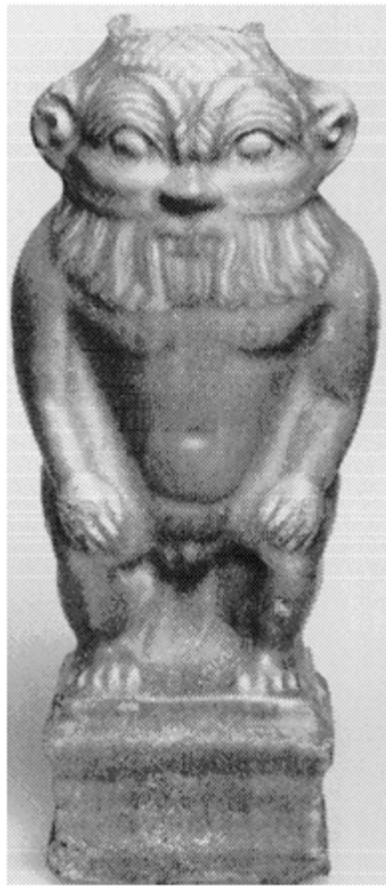
Unfortunately, we don't know a great deal more about Bes. As Egyptologist Max Muller has noted, "A very rich mythology must have attached to this strange personality, but since it flourished in oral tradition only, it is left to our fancy to guess the stories." Bes seems to have been part animal—he is frequently depicted with a tail, with pointed animal ears, with his beard formed in a lionlike mane. He is chubby and short, a dwarf, with a facial expression that runs the gamut from vaguely cheerful to somewhat forbidding.

Representations of him date back to about 2000 B.C.E., making him older than Cook's Minoan face. His name first appears in the Pyramid texts about 1500 B.C.E. He seems to have been a peasant deity, a sort of blue-collar god, which probably explains our shortage of literature about him. He was a popular figure with workers up through Roman times. Even when the religious heretic pharaoh, Amenhotep IV, changed his name to Akhenaton in 1370 B.C.E., moved his capitol to Akhetaton, and declared the only true deity to be Aten, the sun, his workers still harbored figures of Bes, which have been found at Tell el-'Amarna. The revolution in art that affected Akhenaton's buildings didn't affect the traditional depiction of Bes. Because he is so very different from the other gods in the Egyptian pantheon, many

archaeologists have had no qualms about pronouncing him an alien god, imported from elsewhere. They aren't exactly clear on where this elsewhere was. Some have postulated that he came from sub-Saharan Africa, others put his origins in the East. But I can't help wondering if the odd appearance of Bes might be due not to his being an alien from elsewhere, but simply to being an older deity.



4.3 Head of the Egyptian god Bes from a sword pommel. Blue paste, no date. Like the Gorgon, Bes was always depicted staring out at the viewer, rather than in profile, as the other Egyptian deities were. He also almost invariably had a protruding tongue and oversized eyes. Photograph courtesy of the Museum of Fine Arts, Boston.



4.4 Statue of Bes. An Egyptian ceramic sculpture dating from the second century B.C.E. Photograph courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, bequest of Grenville L. Winthrop.

Since we don't have any myths associated with Bes, we don't know if there was ever a decapitation story to explain the Bes heads. Presumably these heads were used, like Gorgon heads, for an apotropaic function, intended to scare away evil influences. The depiction of Bes on headrests and doorways suggests such a guardian function. By Roman times he was shown wearing armor and brandishing swords, like a pumped-up version of his older self, defending with a vengeance. He is sometimes shown strangling snakes, or even drinking beer. Very late in his history, a female counterpart, Beset, materialized, displaying a similar appearance and functions.

Mesopotamia

One of the oldest works of literature extant is the *Epic of Gilgamesh*. The first copies were found in the city of Nineveh, inscribed on clay tablets in the library of Ashurbanipal that date from the seventh century B.C.E. Other versions have since come to light, and it is now believed that the epic originated in Sumerian times and was composed about 2000 B.C.E.

Gilgamesh was king of the city of Uruk. He was $\frac{2}{3}$ god and $\frac{1}{3}$ man, a biologically unlikely proportion that the text leaves unexplained. With his companion, the wild man Enkidu, Gilgamesh sets out for the Cedar Forest, which is guarded by the ogre Humbaba (called Huwawa in older texts). According to the epic, Humbaba's "roar is like a flood-storm. His mouth is fire and his breath is death." Nevertheless, Gilgamesh fears nothing, and he and his companion enter the cedar forest. Gilgamesh begins chopping down the cedars with his axe, and the noise draws the giant Humbaba, who demands to know who is chopping down his trees. Gilgamesh and Humbaba fight, but now Gilgamesh begins to know fear.

According to a Hittite version of the story, Shamash, the sun god, urges Gilgamesh on, telling him not to be afraid. He sends winds to beat against the monster, notably against his eyes. Gilgamesh is able to defeat Humbaba and cuts off his head with his axe.

What did Humbaba look like? Some images from the seventh century B.C.E., labeled as the head of Humbaba, resemble earlier images dating as far back as about 2750 B.C.E. The vast majority of these depictions show the head alone, without even a neck, and were known as "Humbaba heads." A typical such head shows a full-face view of a staring face with deep lines on both cheeks (often making a pair of fiddle-scroll S-shapes), the teeth gritted and exposed. Humbaba is never given a protruding tongue. Archaeologist Eduard Meyer noted in 1914 that the only three figures in ancient art to be regularly portrayed full-face were the Gorgon, Bes, and Humbaba.

One of the seventh-century heads mentioned above is a very interesting one. It depicts the face of Humbaba drawn with a single, continuous line. This rather thick line zigzags around, making the deeply grooved cheeks and defining a series of teeth before looping back and forth as a beard. We learn the reason for this curious method of execution if we turn the object over, because on the back is noted, "If the entrails are like the face of Humbaba, a rebel will rule the land." The clay piece thus provided a sort of instructional model for divination by sheep entrails. Similar objects exist on which the entrails were drawn to resemble a crescent, a scimitar, breasts, a bull, a womb, and other items. Inclusion of the head drawing suggests, as Sidney Smith noted in 1923, that the face of Humbaba was very well known by this period in history. (Other versions of the entrailface of

Humbaba note that when the entrails look like Humbaba, it is a sign of Sargon of Agade, who ruled the land. Clearly someone didn't like Sargon—who, by the way, ruled in about 2800 B.C.E., which might indicate that the image of Humbaba dates back that far.)

Many writers, citing this piece of art, claim that the face of Humbaba was inspired by the form of entrails. I agree with archaeologist Stephen Herbert Langdon, who noted, "The connection with entrails having been introduced into omen literature led to an overemphasis of this aspect." No one, certainly, suggests that crescents or scimitars owe their shape to sheep entrails. It also seems odd to me that no one has pointed out that the complex, winding form of Humbaba's face is a very unlikely pattern for intestines to fall into by chance.



4.5 Head of Humbaba. Terra-cotta figure from Sumer, twentieth to sixteenth century B.C.E., now in the Louvre, Paris. Humbaba was the demon who guarded the Cedar Forest and was decapitated by Gilgamesh. Like the Gorgon and Bes, he was always depicted staring out of the picture or sculpture at the viewer, rather than in the normal profile. He had gritted teeth and oversized eyes, but no protruding tongue. Photograph courtesy of Erich Lessing/Art Resource, N.Y.



4.6 *Head of Humbaba. Terra-cotta figure from Sumer, twentieth to sixteenth century B.C.E. Original in Iraq Museum, Baghdad. Photograph courtesy of Erich Lessing/Art Resource, N.Y.*

Parallels with the Gorgon are clear enough. Even without the projecting tongue, Humbaba's face-forward position, lined face, staring eyes, and use as a stand alone face as a protection against evil forces make the similarity so strong that in 1934 Clark Hopkins of Yale University wrote a lengthy article claiming that Humbaba clearly was the source for the story and images of Perseus and Medusa. Hopkins added, "Probably the protruding tongue was the first contribution of the Greek genius." Theodor Gaster of Columbia University observed that Humbaba had Gorgonlike powers, and that it was only when Shamash blinded him with winds that Gilgamesh was able to vanquish the demon.

The Babylonian demon Pazuzu (who won recent fame as the possessor spirit in William Peter Blatty's novel *The Exorcist*, a role the demon never played in the ancient world) was also often portrayed as a head only, as a sort of apotropaic figure. And Pazuzu was shown with a protruding tongue.

India

Beyond the Indus River, the Gorgon parallels become much more flamboyant. The subcontinent of India boasts several such parallels, the most common of which is Kirtimukha. The name means "face of glory," and to a Westerner the title is a peculiar one. Perhaps, like the name Eumenides ("the kindly ones") given to the dark and frightening Furies, it is meant as an appeasement to the spirit the mask is

supposed to represent.

Kirtimukha is a Gorgon face exaggerated with a vengeance. The eyes pop out from the face in high relief. The teeth and tusks are densely packed, sharp, and extravagantly long. The tongue is generous and curls somewhat. Surrounding the face is intricate detail work. If the Greek Gorgon is a stiffly formal mask, the Indian Kirtimukha feels like the face of a living, though bizarre, creature.

The Kirtimukha face appears at the tops of arches over doorways and windows. It adorns the backs of carved statues and nests in the headdress of the Hindu deity Shiva. It adorns the corners of towers and the walls of temples. In eastern India it is called Grasamukha (“the devouring face”), while in western India it is known as Rahurmukha (“the face of Rahu”). Sometimes it is called Simhamukha (“face of the lion”). When associated with the fish-monsters known as Makaras, it is Kala-Makara (“the Makara of time”).

What does it mean, this threatening face? What is it supposed to represent? There are actually several myths associated with it, all mutually contradictory. Some explain how the head came to be separated from the body, as the myth of the Gorgon and the myth of Humbaba do, but in other ways these Indian myths do not resemble the myths of Greece or Babylon at all. Probably the oldest is the myth of Rahu. Like *Grasa*, *Rahu* means “devourer,” and both names are identified with the great devourer, Time. This story is told in the *Mahabharata* and in the *Brhatsamhita*.



4.7 Rahu, the eclipse demon of India. Detail of a painting by the

Indonesian artist I. M. Sidigria. According to one set of myths, Rahu drank the Amrita, the liquor of immortality. His head was struck off, but because it had drunk of the amrita, it could not die. Ever since, it circles the sky, trying to drink from the cup of Amrita, which is the moon. When it catches up with the moon, there is a lunar eclipse. But the eclipse soon ends, because the moon passes out through the neck. The head of Rahu became the kirtimukha. In other legends Rahu was the catalyst by which kirtimukha was formed. Photograph © Donald F. Trombino, F.R.A.S., Davis Memorial Solar Observatory.

Long ago, the gods arranged with their enemies, the demons, for their help in churning the oceans. The churning of the waters would produce the nectar of the gods, *amrita*, which would make whomever drank it immortal. This was to be divided between the gods and the demons. After the churning, however, the demons carried off the amrita themselves. They quarreled among themselves, each wanting more than the others. Finally, they entrusted it to the god Vishnu for division, but Vishnu took the cup of amrita and gave it all to the gods. The demon Rahu assumed the shape of a god in order to get a drink, and he succeeded. Vishnu recognized him, however, and struck off Rahu's head before the amrita could pass through his throat. Having drunk the nectar of immortality, however, the head of Rahu could not die. Ever since, it has flown through the sky, trying to drink again from the cup of immortality. This cup is the moon. Every now and then Rahu catches up to the cup and devours it. It is then that we have an eclipse of the moon. But there is nothing beyond Rahu's neck, so the moon soon passes through and reappears in the night sky. The head of Rahu then chases after it again, causing an endless cycle of eclipses.

In another story the head that becomes Kirtimukha is not that of Rahu, although the demon Rahu is the catalyst for the birth of that symbol. This myth is recounted in the *Padmapurana* and the *Skandapurana*. (The *Skandapurana* dates from the seventh century C.E. These are late sources, so the myth itself may be of late creation.)

In this story, the demon king Jalandhara wished to humiliate the god Shiva and sent Rahu to demand that Shiva send Jalandhara his bride, Parvati. Shiva's answer was to emit a burst of energy from his *ajna chakra* ("lotus of command"), that power spot between his eyebrows that is so often marked with a daub of color or a third eye. The energy manifested itself as a lion-headed monster with a lolling tongue, "eyes like lightning," hair standing on end, and an emaciated body, the very spirit of hunger, which immediately threatened to devour Rahu. Rahu threw himself upon the mercy of Shiva. Shiva extended his protection, but this left a problem, for the new monster

had nothing to devour. What, it asked the Lord Shiva, should it now eat? Shiva's solution—since he could not annihilate what he had created—was to tell it to eat itself. This the monster readily did, devouring as much of itself as it could reach, all the way to its neck, so that only the face remained.

“You will be known, henceforth, as the Face of Glory,” said Shiva, “And I ordain that you shall abide forever at my door. Whoever neglects to worship you shall never win my grace.” This story explains why Kirtimukha is found at the entrances to temples of Shiva. Before entering, worshipers always pay their respects first to the Face of Glory by sprinkling it with water. If it is located on the floor, they are careful not to step on it.

Another legend is more convoluted. Hiranyakashipu, the brother of Simhika (the Lioness, who is, in turn, the mother of Rahu), practiced austerities and won a great benefit by those means. He was told that he would be slain neither by man nor by animal. Such apparent immortality would make anyone cocky, especially one of the race of Rahu. Hiranyakashipu hated the god Vishnu, and it must have been galling to him that his own son, Pralahda, was a devout worshiper of Vishnu. During one argument, Pralahda told Hiranyakashipu that Vishnu was omnipresent. Hiranyakashipu scornfully asked if Vishnu was present in the pillar he pointed out. Pralahda replied that yes, Vishnu was even in that pillar. Hiranyakashipu then struck the pillar with his staff to kill the god within.

Vishnu, who is truly omnipresent, was in that pillar. He burst forth in the form of Narasimha (“man-lion”). Pictures represent this avatar of the god as having a human body, but with claws on hands and feet and a lionlike head with staring eyes, broad nose, a fanged, toothy grin, and protruding tongue. This creature—neither man nor beast—immediately tore Hiranyakashipu to pieces. Afterward the avatar became proud of this act, and so Shiva seized and skinned Narasimha, severing his head to make the Kirtimukha. This legend is from the *Anubhavasikhamani*, which dates from the thirteenth century C.E.

We thus have at least three legends for the origin of the Kirtimukha. Although often identified as the face of a lion, the Kirtimukha is usually not really very leonine, most of its incarnations being fantastic composite faces. The Kirtimukha is present throughout India and beyond; it is found in Tibet and down through southeast Asia into Java and Cambodia, where it is called Vanaspati (“lord of the woods”).

Although one would like to report that the Kirtimukha is a figure of great antiquity, in fact most examples are of relatively late origin. Some figures do date back to the seventh century C.E., but the form did

not become widespread until after the tenth century. As I've noted above, most of the legends also date from that same period.

The Kirtimukha has been interpreted symbolically in various ways. It has been said to represent the cosmic fire that periodically cleanses the world, or to be the emblem of Sun and Death, the pair that generates and destroys everything in the world. The name *Kala-Makara* indicates that it may be Time, the great destroyer. Mythographer Joseph Campbell saw it as a symbol of the destructive aspect of life itself.

There is another Indian figure that bears a powerful resemblance to the Gorgon. Unlike the other parallels mentioned so far, this one is an actively worshiped deity. Followers of Shiva might pay reverence to the Kirtimukha and its symbolism, but this other deity is venerated for itself alone. I do not wish to insult these worshipers, to imply that the object of their worship is derived from other mythologies, or to belittle its form. But to an outside observer the parallels with the Gorgon are quite striking.

The deity in question is Kali. "Probably no Hindu deity has been more frequently maligned, by both non-Hindus and Hindus, than Kali," writes David R. Kinsley in his excellent survey of Kali worship, *The Sword and the Flute*. "In large measure this has been the result of her terrifying appearance, which strikes many observers as extreme." Although there are many different interpretations of the goddess Kali, the one Kinsley has in mind is Smashan Kali, the terrible aspect of Kali. Even the Smashan Kali may be depicted in different ways, including a very human, lovely individual or a grotesque one. This latter type is the extreme, Gorgonlike figure that many find objectionable.

A description of Smashan Kali is given in the *Syama Praharanam*, which describes her as "of terrible face and fearful aspect," with fanglike teeth, disheveled hair, and a grin. She holds severed heads and a bloody scimitar. The resemblance to the Gorgon is clear. Artistic depictions of Kali make the similarity even more obvious. The eyes bulge as much as those of the Kirtimukha. The tongue protrudes extravagantly, often ribbonlike. The hair is wild. Sometimes she is shown drinking blood that spurts from one of the disembodied heads she is holding.

As was the case with the Praxidikae, animals are often sacrificed to Kali through decapitation. It is claimed that human heads were offered to her as recently as the nineteenth century. Today, the offerings are more likely to be goats and (because of their resemblance to a head?) coconuts.

What is the source of this image and its meaning? There are many

who claim that Kali is very ancient, that she derives from the great Mother Goddess who held sway in the ancient world before being overthrown by patriarchists, who supplanted her with male deities like Zeus and Poseidon.

A study of existing literature paints a very different picture. Kinsley notes that Kali seems not to have been known to the earliest Indus Valley civilizations, and that she first appeared between 200 B.C.E. and 300 C.E. The name *Kali* appears in the *Mundaka Upanishad* before this time, but there it refers to one of the seven tongues of the fire god Agni, not to an independent goddess.

In her earliest history as a separate deity, she is a “tribal goddess worshipped by hunters and thieves.” She appears briefly for the first time in the *Mahabharata*, where it is said that she is black in color, has a bloody mouth and disheveled hair, and leads away the dead with a noose. In this period, up through about 400 C.E., she doesn’t seem to be associated with Shiva or any other deity. In the *Kumarasambhava* of Kalidasa of the fifth century C.E., she is still a minor deity, and in the eighth-century *Malatimadhava* of Bhavabhuti she is “a terrifying, demonic creature worshiped by those on the periphery of society. She is not identified with the mainstream of Hindu religion, nor does she appear as a great goddess in her own right.”¹²

Kali begins to appear as a major figure in the *Devī-māhātmya* (ca. 4th century C.E.), which describes her at length, along with recounting her battles with demons. Bengal has been the center of her public worship, yet Kinsley finds no mention of her in Bengal before about 1550 C.E. She becomes prominent in Bengali literature about the seventeenth century, which is when public worship of her is first mentioned.

Kali is Shiva’s wife, and in a series of myths from southern India the god defeats her in a dance contest. In a more famous myth, however, their roles are reversed and Kali appears as the more powerful one. This myth, found in the *Adbhuta Ramayana*, explains the description from the *Syama Praharanam* quoted above. The god Rama, having defeated a ten-headed Ravana demon, returns and brags about his conquest to Kali (who is in the form of Sita). Sita, unimpressed, asks Rama what he would do if he encountered a Ravana with a thousand heads. Rama replies that he would slay such a creature, even if it had a thousand heads. Sita says that a thousand-headed Ravana does exist, but that it would be better if she were to fight with the demon. Rama, enraged, sets out to find the thousand-headed Ravana. After locating him, Rama attacks. The fury of the Ravana drives away all of Rama’s allies, and Rama finds himself terrified and alone on the battlefield confronting the monster. Sita, seeing the situation, assumes the threatening form of Kali and attacks.

She kills the demon, cuts off his heads and hands, and gulps down the blood. In her frenzy, she continues to attack and to dance around the fallen monster. The gods, alarmed and not knowing how to stop the berserker goddess, ask Shiva to intervene. He covers himself in ashes from the cremation ground where she is dancing and throws himself at her feet, supine like one of the corpses. The battle-intoxicated Kali is about to tramp upon him when Brahma calls out to her, pointing out that she is stepping on her husband. She suddenly comes to her senses, recognizes Shiva, and falls quiet. As a sign of her profound embarrassment, she presses out her tongue. She then resumes her appearance as Sita and returns meekly home.

This myth has the feeling of a late story, meant to explain the image of Smashan Kali. It accounts for the frenzied appearance, the garland of skulls and hands, the blood-drenched mouth, and the corpse-like appearance of Shiva at her feet. It even gives an explanation for the protruding tongue. Its emphasis upon the superiority of Kali is at odds with earlier literature. Nevertheless, this is the most popular form of the myth at the Kali shrines in Dakshineswar and Calcutta, both of which are located in Bengal. (The very name of Calcutta is a worn-down form of Kaligata.)

At Dakshineswar there is a black basalt statue of Kali, who is depicted as the *Syama Praharanam* describes her, four-armed and bearing that Perseic curved sword that looks very much like a *harpe*. Her eyes are painted white and outlined in red, her lips are full and red, framing a mouth full of very white teeth and a very prominent red-painted tongue. Beneath her right foot is a diminutive figure of the reclining Shiva. The statue is normally garlanded with flowers, making the details difficult to see. Iron bracelets, coins, and sticks of incense thrown by worshipers also cover the base of the statue. The smells of burning incense and *ghee* (clarified water buffalo butter) fill the air. Hanging on the wall are pictures of deities, sainted devotees of Kali, and the swords used in beheading sacrificial animals.

All of Kali's features have been the subject of intense scrutiny and interpretation by her worshipers, and there are many explanations for them. Ramprasad (1718–75) saw the battle-maddened goddess as mistress of the madness of all the world, to be approached as a child approaches his or her mother, in awe and wonder. Ramakrishna (1836–86) remarked upon her odd and wild appearance but urged the same childlike acceptance of the mad destroyer and creator as Ramprasad did.

Some see in Kali the manifestation of Shiva's power—black as the formless void, her hair symbolizing boundless freedom. Her tongue is a sign of shyness at having profaned her husband's body. Or it is the physical manifestation of the sound that creates the world. Or it is the

redness of activity contained by the whiteness (the teeth) of spirituality.

Kali's bad reputation may partly be due to her veneration by the cult of Thuggee. In one variation of her mythology, Kali fought a demon and, typically, killed him by decapitation. But from the blood that fell to the ground sprang other demons (just as the falling blood of the Gorgon begot snakes and venomous reptiles). Kali was threatened with an exponentially increasing tribe of enemies, as Hercules was with the multiplying heads of the hydra. Like that hero, she found an original solution: She tore the hem from her garment and used this to strangle her victims, thus shedding no blood. As each died, she drained its blood by drinking it, piercing its neck with her curved fangs like a vampire. Eventually, tiring of the task, she created from the sweat on her arms two human helpers, who took over the task of strangling the demons. These were the first Thuggee.

The Thuggee, or Phansigars, claimed that she enjoined her followers to continue to live by selecting and strangling victims with a handkerchief called the *rumal*, which was ordinarily worn about the waist. They also carried a sacred pickax, supposed to be the image of her fangs. The religion was hereditary—one was born a Thug and entered by birth into a tradition of ritual murder.

The Thuggee operated in secret, looking like ordinary individuals until they struck. Before venturing out, they would sacrifice a sheep to Kali, cutting off the head and placing it, with a burning lamp, before her image. They fell in with solitary travelers, strangling them when they were out of sight from villages. By stealth and bribery they escaped prosecution.

According to the cult's mythology, the goddess originally disposed of the bodies of victims herself by devouring them after the Thuggee left. One novice, however, imitating Lot's wife, looked back instead of going straight away. The angered goddess declared that henceforth she would no longer eat the corpses. After that time the Thuggee cut up and buried the bodies.

The combined forces of modernization and British pursuit destroyed the cult in the nineteenth century. Railroads and modern conveyances carried travelers about in larger numbers and greater safety. More important, modern communications helped to circulate information that made it easier to track Thuggee bands. Indian authorities punished captured cult members by cutting off the hands and nose or by walling them up alive inside columns (shades of Narasimha!).

But it was the fanatical efforts of William Sleeman, a British officer serving in Bengal, that did the most to eradicate the Thuggee. From

1818 to the 1830s, Sleeman energetically pursued and suppressed the cult. A friend of his, Mrs. Fanny Parks, visited and described a Thuggee temple. She was disappointed, saying that the statue of Kali looked more like a child's doll than a redoubtable goddess. Nevertheless, the picture she published clearly showed the Gorgonlike, staring eyes.

In 1984 Americans were introduced to the Thuggee cult through the motion picture *Indiana Jones and the Temple of Doom*, which depicted the Thuggee as a much more organized and flamboyant movement than it in fact was. The rude depiction of the goddess was perhaps the truest thing in the film. The movie prompted American schoolchildren to ask friends of Indian descent why they practiced such a strange religion. It is worth reiterating that the cult of Thuggee has nothing to do with popular Hinduism, or with the worship of Kali as practiced today in Calcutta and Dakshineswar. To most Hindus, Kali is the personification of the powerful forces in the universe. Many declare that we live in Kali Yuga, the last and most terrible of the ages of the world, although others see in this belief a cynical view of the world.

In Indian gaming, the toss of the dice that comes up with a single mark on each die—what we in America call “snake eyes”—is called “Kali.” It is a losing toss, which may explain the name. But I note that the toss resembles a pair of staring eyes (as the American name suggests), and that Kali's staring eyes, like those of the Gorgon, are her most striking feature.

Indonesia

Hinduism is practiced by some of the inhabitants of the peninsulas and island of southeast Asia, and the Kirtimukha and Kali are known there. But their presence has not prevented a unique local figure from developing as a Gorgon parallel. In Bali there is a figure known as Rangda. Her name means “widow,” and she is seen as a sort of witch, a child-stealer like the Lamia of Greek mythology or Lilith of Jewish legend (and Lilitu of Babylon).



4.8 *Mask of Rangda, the evil widow-witch of Indonesia. The mask is used in traditional religious dances. In recent years Tjakorda Oka (left) has promoted a secular version to be used for the tourist industry. Photograph by Phillip McKean. From Mother Worship: Themes and Variations, edited by James J. Preston © 1982 by the University of North Carolina Press. Used by permission of the publisher.*

Rangda is an obvious Gorgon parallel because of her appearance, which is very much like that of Kali and the Kirtimukha. She has the requisite staring popeyes, broad nose, wide grin with fangs, disheveled hair, and excessively long, protruding tongue. As a widow, she is associated with the death of her husband, and with death in general. One Balinese myth associates her with the historical king Erlangga. According to this story, Rangda was the mother of Erlangga. She was exiled to the forest by her husband, who suspected her of being a witch. After her husband's death, she sought to overthrow the kingdom of Erlangga by the use of black magic.

Rangda appears in a traditional dance with the dragon Barong (whose name is short for Barong Keket—"lord of the forest"). The story that links them is called the "Tjalon Arang." According to this, Rangda was a woman from eastern Java who was angered by the refusal of one of the royal sons to court her daughter. From the goddess Durga (often identified with Kali) she received permission to lay waste to the countryside. Her followers, the Sisias, used magic learned from Rangda to bring disease to the land; they also ate corpses and released the layaks, minor demons, upon the populace.

Barong appears onstage with his followers, who are stripped to the waist and carry the Balinese daggers called *kris*. They attempt to stab Rangda, but she glares at them. Instead of turning to stone like the victims of the Gorgon, they fall into trances and stab themselves. Priests move in and sprinkle the men with holy water and fumigate them with incense, releasing them from the spell.

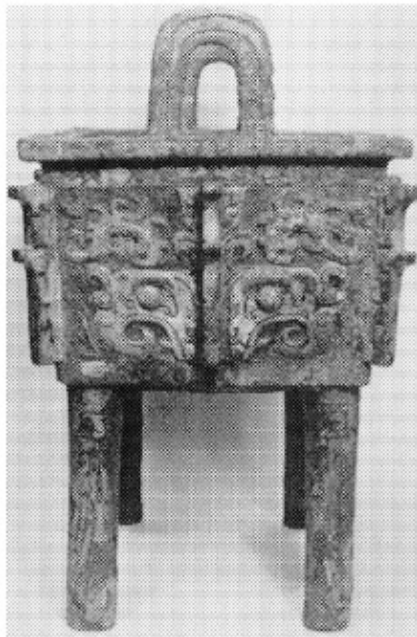
The performance of this drama is much more complex than this brief outline indicates, being interspersed with dancing, orchestral interludes, and comic pieces. Since the 1930s the dances have been performed for tourists, using unconsecrated masks and props.

In Sumatra, Gorgonlike heads are carved on posts called *singa*, which are placed outside to protect houses and villages. The word is Indian for “lion,” and the figure is thought to have been borrowed from India.

China

There are many examples of Gorgon parallels from China. Bronze ceremonial axes dating from the Shang period (eleventh to twelfth centuries B.C.E.) bear incised faces with broad noses, huge, staring eyes, and the characteristic wide-mouthed grin of the Gorgon. The spread-out ears and carefully detailed hair recall the Gorgon as well. These axes appear to have been used for sacrificing human victims at the burial of important persons. They were found at the Hsin-ts'un site near Hsün hsien in Honan province.

Near K'ai-feng, also in Honan province, were found bronze masks from the western Chou period (ninth century B.C.E.). These masks, like the Hsin-ts'un axes, are very Gorgonlike, having huge eyes (with the pupils punched out), broad noses, forehead markings, gritted-teeth grins, and fangs. The masks look as if they could be worn by people, but the discovery in 1955–57 of other masks placed in a burial site at Chang-chia-p'o in Shensi province showed that such items were originally attached to the heads of horses (all the masks were found where chariots had been buried along with the dead). Speculation is that the masks were attached between the ears of horses as a means of frightening the enemy.



4.9 Bronze ritual Chinese food container (Fang Ting) bearing the traditional T'ao t'ieh mask. The eyes and nose are clearly visible in two places in this photograph. Later tradition called this face "The Glutton," and claimed it was a warning against overeating. Western Chou period, tenth-eleventh century B.C.E. Courtesy of the Arthur M. Sackler Museum, Harvard Art Museums, bequest of Grenville L. Winthrop.

4.10 *Bronze ritual food container (Fang Ting) bearing the T'ao t'ieh. Early Western Chou, tenth-eleventh century B.C.E. Courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, bequest of Grenville L. Winthrop.*



4.11 *Bronze ritual food container (Fang Ting), early Western Chou, twelfth-eleventh century B.C.E. Courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, anonymous gift.*

During the Chou period (1122–256 B.C.E.), wooden carvings depicted bug-eyed creatures with gritted teeth, fangs, and extravagantly long and textured tongues. These figures seem to have been used as tomb guardians. Additional parallels will be discussed in [Chapters 8](#) and [9](#). The most important Gorgon parallel from China, however, is the T'ao-T'ieh, sometimes called the Glutton. This is a highly stylized face that appears in many places, most notably near the tops of serving vessels. It has two large, staring eyes, a prominent nose, fangs, and a great deal of ornamentation. The lower jaw is almost invariably missing. Interpreters see in the mask a tiger, lion, or dragon figure. It was incised on pottery vessels or, more commonly, attached to bronze vessels. The third-century C.E. writer Kuo P'o claims they were meant to represent the evil spirits of the hills and wastelands that Emperor Yu the Great had emblazoned on his Nine Cauldrons, as related in the *Tso Chuan*. Also in the third century B.C.E., Lu Puwei wrote in the *Lu shih ch'un ch'iu* that "on Chou vessels there was put a T'ao-T'ieh with a head, but no body. He is eating a man and thinks he is going to swallow him, but already his body is destroyed.

The object of the design was to warn people that the hour of disaster was at hand.” Some saw this as a warning against the acquisitive state, but the more usual interpretation is that the T’ao-T’ieh is meant as a warning against overeating by the diner who has to look at the face during dinner. Modern archaeologists have unanimously branded both interpretations as later inventions and claim that the original meaning has been lost.

Use of the T’ao-T’ieh was widespread and, with variations, has continued into modern times. Its similarity to the Gorgon and other forms has been much remarked upon, prompting sinologist William Willetts to protest, “The idea of a connexion between the T’ao T’ieh and similar forms in the art of Mycenae, Persia, India, and Amerindia has often been mooted and is of course extremely attractive, but it should be resisted as far as possible.” These words prompted mythologist Joseph Campbell to retaliate, “In the light, however, not only of the visual likeness but also of the ancient Chinese commentator’s statement [that the T’ao-T’ieh had no body] it is not easy to follow Professor Willet’s unexplained advice to reject out of hand all thought of any possible connection between Chinese and other variants of this mythic figure.”¹³ Campbell believed that the similarities between the parallels I’ve already noted—and those I am about to—spoke for a case of cultural diffusion.

Japan

I will note some interesting Gorgon parallels from Japan in [Chapter 9](#). Aside from these, my chief candidate is an unusual figure now commonly found in Japanese gift shops—the Daruma doll. These are usually small, ovoid, papier-mâché figures that stand upright on a flat base. They are colored red with gold decorations, except for a depressed oval region that is meant to be the face. This area is flesh-toned, with a bump representing the nose. The lips are suggested with a red line, and black stripes delineate the moustache, beard, eyelashes, and brow. Two blank white circles indicate where the eyes should be. The entire primitive sculpture suggests a hooded, robed monk.

Darumas are employed as wishing dolls. The owner inks in a large, round, black dot in one of the blank eye spaces and then makes a wish. When the wish comes true, the owner is supposed to fill in the other eye. This use of the doll appears to be a relatively late innovation, beginning around the seventeenth century. It is apparently an outgrowth of the figure’s apotropaic function: it looks for the hoped-for wish, in addition to warding off evil. But the Daruma doll was not always the apparently lightweight wishing-figure of today. There exist wonderfully executed examples carved in wood, and the

subject was a popular one for netsukes.

The history of the Daruma doll is well known. It has its origin in an Indian figure that dates back one and a half millennia. *Daruma* is short for *Bodaidaruma*, the Japanese form of the name *Bodhidharma*. Bodhidharma was a Buddhist monk from Conjeeveram, near Madras; he was said to have been born in 470 C.E. and to have died in 543 C.E. Considered the twenty-eighth patriarch of Buddhism since its founder, Gautama Siddhartha, Bodhidharma traveled to Chien K'ang (present-day Nanking) in China in 520 C.E. There he was received by the pro-Buddhist Emperor Wu-ti of the Liang dynasty. He formally established the Buddha-Mind School of Buddhism, called Ch'an in China. With its emphasis upon meditation and its love for nonrational riddles, this school must have brought considerable confusion to the emperor. When he asked Bodhidharma to define the chief principle of Buddhism, the emperor was much disturbed and dissatisfied to be told it was "vast emptiness."

Bodhidharma went to the Shao-lin temple on Wu-tai Mountain in Honan province to practice his meditation. His form of Ch'an Buddhism prospered, becoming the dominant form of Chinese Buddhism by the end of the Ming dynasty (seventeenth century C.E.). He himself never visited Japan, but his form of Buddhism was carried there by his followers, where it became known as Zen Buddhism.

Accounts of Bodhidharma's life are as fantastic as those of the Western saints. It was said that he meditated for nine years facing a wall, tempted the whole time by demons as Saint Anthony in the Western tradition was said to have been assailed by demons. According to some, his legs atrophied as a result. It was said that he found himself falling asleep over and over again. To prevent this, he cut off his eyelids and threw them to the ground. When they fell, they grew into the tea plant, which Zen followers use to keep awake during long meditation sessions.

One suspects that some of the details in these stories were meant to explain the Daruma figure rather than to illuminate the life of the saint. The legend of the atrophied legs explains why the figure is legless. The cutting off of the eyelids explains the round-eyed, Gorgonic stare. If this is the case, then the Daruma figure could significantly predate the life of the historical Bodhidharma. It is interesting to note that one sometimes sees the human figure of Daruma within the folds of his robe replaced by an owl, as if the staring eyes of both were their most important feature.

The Daruma figure is the favorite model for snowmen in Japan, for obvious reasons. Large papier-mâché Daruma figures are often mounted in Japanese rice fields to protect the grain. The significance

of this will be made clear in [Chapter 9](#).

The Americas

Protruding tongues were prominent on figures carved on the totem poles of Indians of the Northwest Coast. They are most commonly found among the Haida, frequently among the Tlingit, Kwakiutl, and Nootka, and occasionally the Bella Coola and Tsimshian. In most cases the face of the figure is large relative to the body, with very Gorgonlike gritted teeth, fangs, and oversized eyes. Some figures consist only of the head, with no body.

The grizzly bear figure is probably the most common such carving. Wolves and beavers also appear. Other animal figures that display the long tongue are the sea lion, killer whale, sea grizzly, and sea wolf. The daunting figure of Tsonoqoa, the cannibal wildwoman of the woods, sometimes also has a protruding tongue. There do not seem to be any myths, however, that explain the curious appearance of these figures.

The Iroquois in what is today New York state had legends about Great Head, a creature consisting solely of a giant head with huge eyes and long hair.

But there are many explicit Gorgon parallels from farther south. I have already noted the face in the center of the Aztec Calendar Stone. To the Aztecs, this was the Eagle's Bowl, Cuauhxicalli, a twenty-five-ton basalt disc dedicated in the year 1479 C.E. in present-day Mexico City. It was executed during the reign of the sixth Aztec monarch, Axayacatl, and was found buried in the city's main square on December 17, 1760.

The figure in the center is the face of the sun, usually taken to be the Sun as the Lord of Heaven, Tonatiuh. He is outfitted in the accoutrements of a deity—a crown on his head, a rod through the septum of his nose, earplugs through his lobes, and a necklace below. The protruding tongue takes the form of an obsidian knife. Similar knives are shown elsewhere on the stone. One appears immediately above the face, just to the right of the V-shaped object at twelve o'clock, where it represents the date. Another appears in the rectangular "window" at about two o'clock and stands for the eighteenth day of the month, Tecpatl. It is appropriate that the sun god have a knife for a tongue, since he was held to be nourished by the blood of victims sacrificed with such a knife.

It is puzzling that there are no other figures of Tonatiuh resembling the one on the Calendar Stone. In fact, Tonatiuh is nowhere else depicted *en face*, as he is on the stone. For this and other

reasons, some think that the face in the stone's center may be some other manifestation of the sun. Cecelia F. Klein holds that the face is Xochipilli-Piltzintecuhtli—the sun as he appears at night, traveling through the underworld from the point of his setting to the place where he rises again. Like Tonatiuh, Xochipilli-Piltzintecuhtli has a blond wig (representing solar rays) and a jewel-tipped nose plug. This deity is also generally depicted in profile, rather than full-face, but he is associated for obvious reasons with earth monsters, who *are* depicted *en face*.



4.12 Coatlicue, the Aztec Earth goddess. This representation of Coatlicue was often incised on the bottom of monuments so that it would always be in contact with the earth. This probably saved many of them from destruction in the colonial period. The large eyes, toothy grin, and protruding tongue are similar both to the face of the Sun in the Aztec Calendar Stone and to archaic Gorgons. Photograph reproduced from Cecelia F. Klein's *The Faces of the Earth* (1976) by permission of Garland Publications.

The earth goddess Coatlicue is normally depicted in one of two ways. One is as a standing figure whose head consists of two reptile heads in profile, forming a single monstrous face. The other image is very similar to the face at the center of the Calendar Stone. In this representation, Coatlicue is shown as a head, face forward, with staring eyes, a very toothy grin, broad nose, decorated cheeks,

earplugs, characteristic hairdo, and protruding tongue. This view of the goddess are much more common (if less well known today) than the *en face* sun god. The images I've described were often carved on the underside of a monument, so that when the stone was set in position the carving would be pressed against the earth whose deity it exalted. The carving was thus invisible except when it was being created. It may be this circumstance that preserved many of the images of Coatlicue.

Other Aztec deities are rendered with similar faces. Xolotl, the evening star (Venus) is depicted in a manner very like to Tlaltecuhltli and the Calendar Stone face, with a staring, grinning, protruding-tongued visage much like a Gorgon. In the codices, the stellar demon Yoalactecotli is drawn with a skull-like head, ringed eyes, a protruding tongue, and a body like a skeleton. That is also a good description of Mictlantecuhtli (Mictlan was the Aztec land of the dead). As Klein notes, the full-face portrayal is associated with gods of the night sky and of death.



4.13 Xolotl, the Evening Star. Stone relief from Tepetzintu. Huastec. Reprinted from Cecelia F. Klein's *The Faces of the Earth* (1976) by permission of Garland Publications.



4.14 Mictecacihuatl, the Aztec Death Goddess, from the *Codex Magliabecchiano*. Post-conquest Aztec. Photograph reproduced from Cecelia F. Klein's *The Faces of the Earth* (1976) by permission of Garland Publications.

Before the Aztec ruled in the region of present-day Mexico City, central Mexico played host to other cultures. The Teotihuacan culture lasted from about 100 B.C.E. to 700 C.E. Among the gods of this people was the rain god Tlaloc, who appeared full-face on *stelae* (upright, carved standing stones), *merlons* (the crenellations atop buildings), and urns. The face of Tlaloc featured round, staring eyes (sometimes represented by round holes), a wide-open mouth full of teeth, sometimes greatly exaggerated in length but usually with fangs, and a protruding tongue. At the same time, to the southeast in the Valley of Oaxaca, the rain god was Cocijó, who was portrayed in a similar fashion. It is interesting to note the correspondence of urn figures with Greek pottery figures and of the Tlaloc merlons with Gorgon antefixes.

In the present-day state of Guerrero in western Mexico, stone slabs have been found carved with daunting faces—huge circular eyes, gritted-teeth mouths, and wild hair. Farther south, the Maya of Yucatan flourished from about 300–1200 C.E. Their jaguar god looked very much like the Aztec sunstone figure. The face-forward carvings feature oversized eyes, the gritted-teeth grin, and protruding tongue.

Mayan war gear displays Gorgon emblems amazingly like the

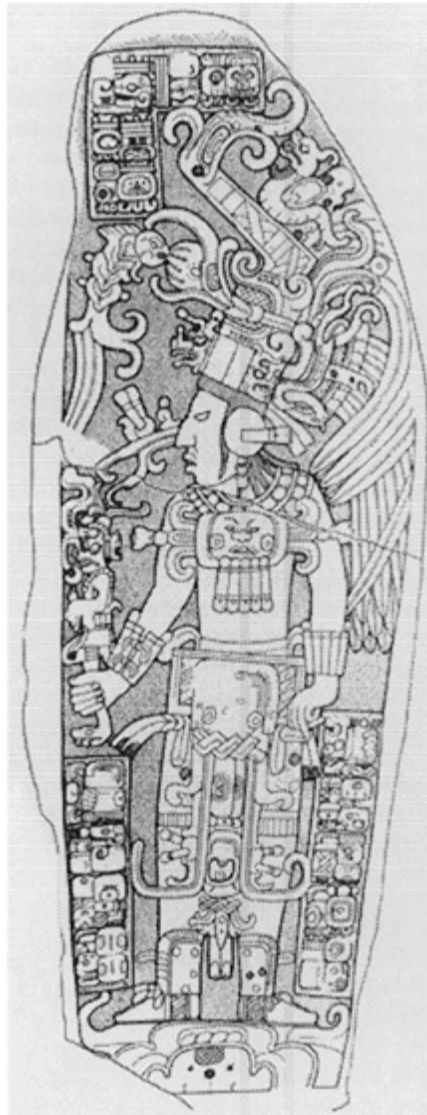
ancient Greek figures. Mayan shields were much smaller than their Greek counterparts, but many of them bore broad-nosed, staring, grinning faces on them. A striking example of late classic Maya statuary from Jaina Island shows a warrior carrying a shield whose center is filled with a perfect Gorgon face. It features the large staring eyes, broad nose, protruding tongue, gritted teeth, and fangs. It is an even better match for the faces on shields portrayed on Greek vases than the Sepik river shields described below. In addition, Mayan kings are often pictured wearing breastplates that have small faces on the center, in the same place occupied by the Gorgoneion on the aegis of Athena. The Mayans sometimes go Athena two better by placing faces on the sleeves as well.



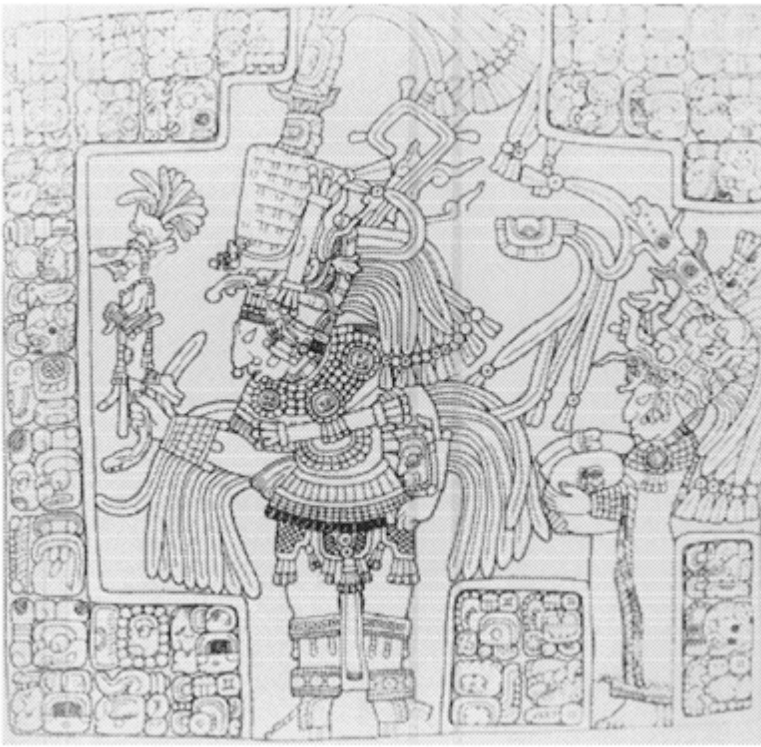
4.15 *Mayan repoussé disk from the Cenote of Sacrifice at Chichen Itza. Once again, note the aegislike breastplate. Reprinted from The Ancient Maya, fifth edition, by Robert J. Sharer, with the permission of the publisher, Stanford University Press © 1946, 1947, 1956, 1984, 1994 by the Trustees of the Leland Stanford Junior University.*

The metalwork of the Chavin from the Peruvian highlands of about 800 B.C.E. features very Gorgon-like faces. The essential Gorgon features are all there—large staring eyes, broad nose, grinning teeth with pronounced fangs. The scholar Miguel Covarrubias has attempted to delineate relationships and family trees for these diverse figures. He sees evidence of Chavin influence on the carved stones of Guerrero. He believes that the figures carved by the Olmecs, one of the oldest of the Central American cultures (the Olmecs flourished along the southern coast of the Gulf of Mexico from about 1400 to 100 B.C.E.)

influenced the Gorgonlike Cocijo of Teotihuacan, the Tlaloc figure of central Mexico, and the jaguar god of the Maya. Yet no existing Olmec figure provides a convincing Gorgon parallel. The ones we know do not have the characteristic teeth, fangs, huge eyes, or protruding tongues. In fact, Olmec figures are good examples of *en face* figures that are *not* Gorgoneia. That these odd, scowling, closed-eye figures could give rise to descendants that have all the familiar Gorgonic features the originals lack doesn't seem likely.



4.16 Mayan figure from Stela 7, Machaquila. The breastplate again bears an aegis-like face. Reprinted from Eric S. Thompson's *Maya History and Religion* (1970), University of Oklahoma Press.



4.17 Mayan carved lintel from Yaxchilan temple 33, dating from 756 C.E. It depicts the accession of king Bird Jaguar. Note the aegis-like breastplate with its faces. Reprinted from *The Ancient Maya*, fifth edition by Robert J. Sharer with the permission of the publisher, Stanford University Press © 1946, 1947, 1956, 1984, 1994 by the Trustees of the Leland Stanford Junior University.

Pacific Cultures

Gorgonlike faces with staring eyes and protruding tongues are present in several places in the South Pacific, most commonly among the Maori of New Zealand, where they appear on the ridgepoles of meetinghouses amidst much architectural filigree. They are placed at the apex of storage buildings, just like *akroteria* in Greece. They are carved on decorative panels and on supporting poles. The eyes of these staring figures are often emphasized with inlays of iridescent *paua* (haliotis) shell. In New Zealand it is said that the eyes are those of Koururu, the owl (recall the Daruma and, arguably, the owl of Athena). The god Rongo, it is said, sacrificed the owl and placed him under the rear wall of his house. Protruding tongues adorn the “godsticks” of Rongo and of Kahukura, the war god.

The form and use of the New Zealand figures so closely duplicates

those of the Indians of the Pacific Northwest that many anthropologists and art historians have become convinced that there must have been some sort of communication between the two groups. The mildest form of this belief holds that both derived their inspiration from China, with the archetype originating in Chou-era China and spreading in two directions, to achieve similar results at two diametrically opposed points on the Pacific Rim. One must note, however, the lack of similar figures and uses at any points *between* the Pacific Northwest and New Zealand. The Gorgon parallels in China, Japan, and Mesoamerica are all quite different and appear in different contexts.¹⁴

In New Guinea the Gorgon motif adorns the art of the Sepik River region. It is painted on the gables of men's ceremonial houses, carved on house posts, placed on the fronts of war canoes, and applied to decorated stools and hooks. As in Greece, it is used on masks and on the fronts of shields. Some shields from New Guinea look very much like those pictured on Greek vases, with both painted and carved Gorgonic faces.

In New Ireland the Gorgonic face appears on masks as well. As Sarah Gill has noted: "The particular iconography of the masks was a clan secret known only to clan members.... Thus, the exact meaning of the protruding tongue on certain New Ireland masks can only be surmised. It is possible that the masks were meant to represent ancestors: in one mortuary rite, the dancers are said to represent ancestors who come back briefly from the dead to visit their living relatives."

In New Caledonia, long-tongued faces adorn the exteriors of buildings. As in New Zealand, they appear on gables, ridge poles, and pillars.

The long-tongued/staring-eye face surfaces in Borneo among the Ot Danum and Ngadju tribes of the south Kalimantan. There it is often associated with death—it appears on mortuary houses, ancestor posts, and masks worn during mortuary rites. The Ot Danum figures may have fangs, and they are said to represent a dead person. The face may be painted on the side of the mortuary house, and the huge eyes are the most striking part. In Sarawak, the face appears on masks and figures representing evil creatures; it is intended to drive away sickness.

Later Europe

Long after the fall of Rome, heads oddly reminiscent of the Gorgon made their appearance in the cathedrals of Europe. I will discuss

gargoyles at much greater length in [Chapter 9](#), but here I wish to draw attention to their kin, the Grotesques—faces carved on the walls, in arches, at the capitals of columns that have no obvious connection with drainage systems. Gargoyles, for all their visual flamboyance, are functional constructions, but Grotesques seem to be architectural extravagances, without any apparent purpose. There are a great many different varieties of these, one class of which consists of heads (usually without bodies) characterized by staring eyes, broad noses, protruding tongues, gritted or prominent teeth, and fangs. There are examples from cathedrals in Lowick, Northumberland, from Canterbury, from Ault Hucknall in Derbyshire, and from Barfreston in Kent.

Conclusion

The foregoing survey is not exhaustive by any means. I have pointed out just some of the clearest and most conspicuous cases of Gorgon parallels from around the world. There are a number of other cases. Many of these are less obvious, and it is not my purpose to try to include all possible matches here. I would like to make a few points, however.

1. Many of these examples seem to serve parallel purposes. Often the faces are apotropaic devices, intended to turn away evil with their own horrific appearance. Their placement seems to argue for this use. In India, southeast Asia, Polynesia, and China, the faces appear over windows and doorways. In Greece, China, and Japan, they appear on antefixes (see [Chapter 9](#)), and the Mexican Tlaloc appears on merlons. In ancient Babylon, Egypt, Greece, and Rome, portable heads were made. In Greece, New Guinea, and Yucatan, the faces appear on shields and breastplates.
2. The myths that explain these faces do not appear to bear much resemblance to one other. In fact, in India there are at least three distinctly different myths to explain the same figure.
3. The appearance of such similar figures has suggested to several scholars that some sort of cultural diffusion is responsible. Yet even a cursory glance at the pattern of distribution and the ages of various examples should cause us to consider this proposition carefully. Bes dates back to about 2000 B.C.E. The Gorgon first appeared in Greece in the eighth century B.C.E. But the Kirtimukha and Kali—at least in their present forms—seem to be of much later provenance. In China and Babylon, such faces date back as far as Bes. In Central America and Peru, there are faces similar to those

in Mexico, but separated from the latter by a considerable gap in time. Were the common appearance of the Gorgon face due to diffusion, one would expect to be able to trace its spread from one point outward by a succession of appearances that start later in time as one moves farther from the place of origin. No such pattern is evident.

4. Lack of a traceable pattern still leaves us with the question, Why are there so many parallels from around the world? This is a legitimate question and, I think, a key one in solving the mystery of the Gorgon. As we shall see in the next chapter, it is one that has impressed itself most deeply on those who have attempted to solve the mystery.
5. The parallels listed in this chapter are only the artistic parallels. I have not tried to look at parallels for the myth itself. Hartland devoted the bulk of his three-volume study to precisely this search for parallels to the elements of the myth. As I've already pointed out, the myths of artistic parallels described here do not match up with the myth of Perseus. The one that comes closest, perhaps, is the tale of Gilgamesh and Humbaba, and I do not agree with Clark Hopkins that the parallel is a close one. Close parallels to the Perseus myth do exist—ones that are much closer than the myth of Humbaba. I will discuss two of these in [Chapter 7](#).

5

EXPLANATIONS

The origination of medusas is a puzzle to science. Their place in the evolutionary scale is a mystery. Their task in the great balance of life is a secret. For they belong to that weird netherworld of unbiological beings, salient members of which are the chimaera, the unicorn, the sphinx, the werewolf, and the hound of the hedges and the sea serpent. An unbiological order, I call it, because it obeys none of the natural laws of hereditary and environmental change, pays no attention to the survival of the fittest, positively sneers at any attempt on the part of man to work out a rational life cycle, is possibly immortal, unquestionably immoral, evidences anabolism but not katabolism, ruts, spawns, and breeds but doesn't reproduce, lays no eggs, builds no nests, seeks but does not find, wanders but does not rest. Nor does it toil or spin. ... Mysticism explains them where science does not.

—Charles G. Finney,
The Circus of Doctor Lao, 1935

IN THE *Phaedrus*, written around 370 B.C.E., Plato sets down a discussion between his mentor Socrates and the eponymous Phaedrus as they walk by the Ilissus River near Athens. Phaedrus asks Socrates if they are not near the spot where Boreas, the North Wind, was supposed to have abducted the maiden Oreithuia. This story is alluded to in most familiar classical sources—Pausanias points out the spot, Apollodorus mentions it, and so does Pherekydes, although in this case we do not have his own word—rather, Apollonius of Rhodes mentions it in his *Argonautica*. There was a full account of the tale in a poem by Simonides, but that, unfortunately, doesn't survive. As a result, about all we know is that Oreithuia, the daughter of Erechtheus, king of Athens, was dancing or gathering flowers with her friends. Boreas, the North Wind, fell in love with her, but his suit was rejected by her father, so he snatched the maiden up from the banks of the river and carried her away; she eventually bore him two sons. The story was very well known to the Athenians of the fourth century, but it is virtually forgotten today.

When questioned about the location by Phaedrus, Plato responds that the actual site is a little farther downriver, at Agra, and that an altar to Boreas marks the spot. What follows is worth quoting:

PHAEDRUS: But tell me, Socrates, before Zeus, do you believe this mythical tale to be true?

SOCRATES: If I disbelieved it, as the wise do, I wouldn't be so odd. In that case, being wise, I might say that while she was playing with Pharmaceia a puff of wind pushed her off the nearby rocks, and that when she came to her end in this manner she was said to have been carried off by Boreas. Or else it was from the Areopagus, for the story is also told that she was abducted from there rather than here. I myself, Phaedrus, believe that such things, while amusing, are the work of a man who is exceedingly clever and industrious but not at all fortunate for no other reason than that after this he must account for the form of the Centaurs and then for that of the Chimaera, and then a crowd of such creatures floods in upon him, Gorgons and Pegasus and a great number of other inexplicable and odd creatures of which strange things are said. If someone who disbelieves in these things is to bring forth a plausible account of each of them, using a sort of rustic ingenuity, he'll need a great deal of leisure. I myself have no leisure at all for such business.¹

Socrates indeed had no leisure for speculating about the origins of myths; he thought it more important to Know Himself, as the Delphic oracle had proclaimed. In other sources, he is represented as dismissing myths interpreted in any way other than as symbols, so it isn't likely that in his discussion with Phaedrus he is endorsing wholesale belief in the myths—he simply dismisses the rationalizers who spin out theories about such unimportant things with so little information. To him, the truth or untruth of the myth of Boreas is not important—certainly not important enough to argue over, so he can brush it aside easily. The worthy pursuits of philosophy are inquiries into the nature of man.

Socrates and Plato wouldn't be happy with the authors who will be discussed in this chapter. The meaning of the Gorgon and its form are precisely what these writers want to discuss. And I have to number myself among such shallow rationalists. In our defense, I suggest that by studying the origin of powerful myths and symbols such as this, we are investigating the nature of man.

Socrates's dismissal of Gorgons and other obviously nonexistent creatures as unimportant must have struck a nerve of some sort, because his pronouncement was quoted and echoed so often in the classical world that it has become almost proverbial. Athenaeus, the third-century C.E. author of a fascinating hodgepodge of a novel, *The Deipnosophists*, quotes Plato directly: "To quote Plato himself: 'A crowd

of similar Gorgons and Pegasuses and other fabulous creatures, incomprehensible in number and strangeness.’ Wherefore I will lapse into silence.” We find similar quotes in the *Hermotimus* of the satirist Lucian, the *Moralia* of Plutarch, the *Geography* of Strabo, and the *De Placitis Hippocratis et Platonis* of the Roman physician Galen. The message in each case is identical: no educated, rational person really believes in Gorgons, Chimeras, or winged horses. By the fourth century B.C.E., then, people had stopped taking Medusa seriously.

This is a little surprising, really. It’s not as if Gorgons were supposed to belong to some exotic breed of beast that wandered in herds across faraway plains. Rather, it was well known that a Gorgon was one of three monstrous sisters who lived in a mystic realm, daughters of the Old Man of the Sea. Or else the Gorgon was the monster of Hell. Plenty of people today believe in a horned and perhaps goat-footed Devil, though they would never believe that satyrs roamed through ancient Greece. Just because Gorgons had no recognized place in natural history—weren’t creatures that soldiers might encounter in some far-off war—didn’t mean that they couldn’t exist. The Gorgon was supposed to be a special being, a supernatural entity. And there was widespread belief in such supernatural beings in classical times.

Nevertheless, members of the educated public of fourth-century Greece had apparently decided that the Gorgon of *The Odyssey* and of Apollodorus didn’t have much credibility, so they started explaining away the myth in more rational terms. I have already noted how Dionysius Skytobrachion’s novel portraying Medusa as the queen of a tribe of Libyan Amazons was accepted by Pausanias as the probable basis behind the myth. And from another quarter, an entirely different “explanation” grew.

The Deinosophists by Athenaeus, mentioned above as quoting Plato on the Gorgon, is a fascinating book. Incredibly long, it purports to be a record of the dinner-table conversation between friends who gather together and discuss whatever comes to mind—somewhat like Plato’s own *Symposium*, but with food as well as drink. In reality, the book is both a novel and an essay combined in a freewheeling form that lets Athenaeus drag in whatever odd observation he wants, and the conversation wanders all over the map in the course of several volumes. Much of the writing is the sort of stream-of-consciousness that one really does encounter at dinners: “That reminds me of a story I heard once.” Right after one of the group quotes Plato’s by now famous line about Gorgons and Centaurs, another says that the line reminds him of a book by Alexander of Myndus, the *Inquiry into Birds*, that has an interesting passage about Gorgons. We don’t know anything about Alexander of Myndus or his book—nobody else

mentions either of them—but Athenaeus is almost certainly not making them up. Too many of the other things he includes can be verified elsewhere.

Alexander's contribution is worth quoting in its entirety, because it stands at the head of a ladder of traditional beliefs about the Gorgon that reaches all the way down to relatively recent times. We don't know where Alexander got his information.

The gorgon is the creature which the Numidians of Libya, where it occurs, call the "downlooker." As the majority aver, drawing their comparison from its skin, it is like a wild sheep; but some say that it is like a calf. They say, too, that it has a breath so strong that it destroys any one who meets the animal. And it carries a mane hanging from its forehead over the eyes; whenever it shakes this aside, as it does with difficulty because of its weight, and catches sight of anything, it kills whatever is seen by it; not by its breath, but by the influence which emanates from the peculiar nature of its eyes; and it turns the object into a corpse. It came to be known in this wise. Some soldiers in the expedition of Marius against Jugurtha saw the gorgon, and supposing it was a wild sheep, since its head was bent low and it moved slowly, they rushed forward to get it, thinking they could kill it with what swords they had. But the creature, being startled, shook the mane which lay over its eyes and immediately turned to corpses the men who had rushed upon it. Again and again other persons did the same thing and became corpses; and since all who attacked it at close quarters always died, some made inquiry of the natives about the nature of the animal; whereupon some Numidian horsemen, at the command of Marius, lay in ambush for it at a distance and shot it; they then returned with the animal to the commander.²

This is a remarkable story. If Alexander was making it up, it's an early form of science fiction that speculates about how you could overcome a creature that could kill you by simply looking at you. If, as is much more likely, he is not making it up, it reports a very odd story—a collision between a creature who may be the basis of a myth and some soldiers who are firmly rooted in history.

Gaius Marius was a pivotal figure in Roman history, certainly one of the ten most important men in the development of Roman civilization. Yet he is as unknown today as is the once-familiar mythological creature Typhon. All of which goes to prove that existence by itself doesn't help you become or remain a familiar figure. Marius's obscurity is probably due to a modern-day concentration on the Empire, rather than on the Roman Republic.

There's plenty of information about Marius available—Sallust gave a detailed account of him in his *Jugurthine War* and *The Conspiracy of Catiline*. Plutarch devoted a chapter of his *Lives* to Marius. More recently, Colleen McCulloch made him the center of her novel *The First Man in Rome*. Gaius Marius became consul of Rome for the first time in 107 B.C.E. and went off directly to prosecute the war in northern Africa against the Libyan king Jugurtha. It was while involved in this war that the soldiers of Marius's army encountered the Gorgon, according to Alexander. Athenaeus's characters note that the skins of Gorgons were brought back to Rome and hung in the temple of Hercules, where they could be seen by Romans at the triumphal feasts.

So what was the creature that Alexander described? Certainly no animal can kill with just a glance, as Alexander's Gorgon could, though the trait was ascribed to some animals in old bestiaries. From the description, some modern authorities believe Alexander's "Gorgon" to be the gnu, or Barbary sheep. The rest of the description, according to this theory, is tall tale added on either to make the story more exotic or as a misremembered bit of trivia. Certainly the idea of the Gorgon as Barbary sheep dovetails neatly with Professor William Ridgeway's assertion that the aegis of Athena consisted of a goatskin (see [Chapter 3](#)).

If the story of the Libyan animal Gorgon stopped with Alexander it would be strange enough. But it began to develop in another odd direction, and we are fortunate enough to see exactly how and where it achieved this new kink to its story

Gaius Plinius Secundus, usually called Pliny the Elder in order to distinguish him from his equally noted nephew and adopted son, was a Roman administrator and prolific author. He was born in 23 C.E. It says a lot about him that he died in 79 C.E., during the eruption of Vesuvius that buried the cities of Pompeii and Herculaneum. He asked to be rowed close to the site, and was overcome either by the fumes or by a heart attack. Of his writings, only his *Natural History* survives. This is a multivolume work filled with information and trivia that Pliny collected from various sources. In its eighth book, Pliny briefly describes an animal called the Catoblepas. It lived, he said, in western Ethiopia, by which he probably meant northwestern Africa. It was of moderate size and not very active, having a large and heavy head that is always hanging down, looking at the ground. This is fortunate for people, because anyone who looks in its eyes immediately dies.

Pliny obviously took his information from Alexander, or from whatever source Alexander used. Not only is the description of the creature the same, but the name *Catoblepas* means "the downward-looker." Pliny doesn't try to associate it with the Gorgon (that was perhaps Alexander's own invention, suggested by the killing glance

and the headful of hair), although the next entry in his book is devoted to the Basilisk, a creature that supposedly killed with its glance. In the third century C.E., the naturalist Claudius Aelianus, usually called Aelian, disagreed with Pliny about the appearance of the Catoblepas, saying that it more closely resembled a bull. He held that it killed with its breath rather than its glance. Its breath, in turn, was deadly because of the poisonous roots the beast ate. He noted that the Libyan asp could blind with its breath, which isn't very far from the case for spitting cobras. Poison that has been spit into a victim's eye, if it enters the bloodstream, can kill, so the stretch of imagination required isn't really so large.

Pliny's work survived the fall of Rome to become one of the bestsellers of the Middle Ages. His encyclopedic *Natural History* was filled with enough useful information and exotic highlights to make it irresistible. It formed the basis for medieval bestiaries that preserved many of the tales about strange animals (copyists' errors helped to create others). The process culminated in the 1607 book of naturalist Edward Topsell, whose *History of Four-Footed Beasts* was based on the bestiaries and, apparently, on his reading of classical works as well. Topsell's entry on the Catoblepas Gorgon is a bizarre mishmash, blending Pliny's description (or perhaps that of Alexander) with Aelian's, and with Apollodorus's description of the Greek Gorgon thrown in for good measure:

It is a beast set all about with scales like a Dragon, having no haire except on his head, great teeth like Swine, having wings to flie, and hands to handle, in stature betwixt a Bull and a Calfe. And thus much may serve for a description of this beast, untill by gods providence, more can be known thereof.³

Topsell's book was illustrated with woodcuts, and his illustrators had to try to produce a coherent image from this off-the-wall description. They didn't even try to fit all the features in. Gone are the hands and the wings. The illustration in Topsell's book looks like a scaly pig with an unkempt mop-cut of hair. At this point reality caught up with the Gorgon Catoblepas. It may have been mentioned in other works after that point, but it was never again treated seriously. The voyages of discovery to new lands failed to turn up anything even remotely like the Catoblepas, and the cobbled-together creature finally died of obscurity.

The last word on the Gorgon in the ancient world goes to the anonymous author of a work entitled *Philopatris* (*The Patriot*). This author appropriated the name of Lucian, the Roman satirist, but he

wrote around 960 C.E., long after the real Lucian's death. Some of his dialogue contains astonishingly cynical lines:

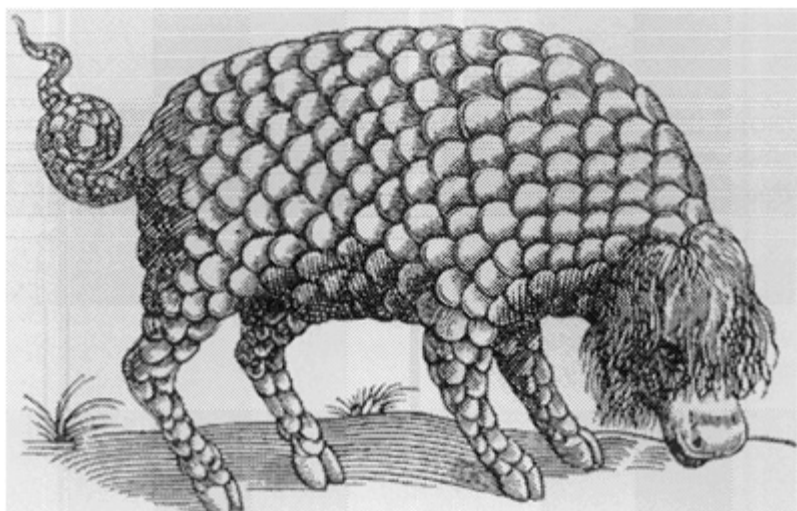
TRIEPHO: And what is the Gorgon? For I'd like you to tell me, since you have conducted researches into such matters and with very great success. For I know nothing of her but her name.

CRITIAS: She was a beautiful and lovely maiden. But, ever since Perseus, a noble hero famed for his magic, cast his spells around her and treacherously cut off her head, the gods have kept her as their defense.

TRIEPHO: I was unaware of this glorious fact that the gods need men. But what use did she have during her lifetime? Was she a courtesan entertaining men in public inns or did she keep her amours secret and call herself a virgin?

CRITIAS: By the unknown god in Athens, she remained a virgin until her head was cut off.

TRIEPHO: And if one did cut off a virgin's head, would that prove something to frighten most men? For I know that countless maidens have been cut limb from limb. ... But all these things are idle talk, fairy tales, myths and wondrous things spread by the poets. So forget about the Gorgons also.⁴



5.1 *Illustration of the Catoblepas or Gorgon from Edward Topsell's 1607*

book, *The History of Four-Footed Beasts, based upon his composite description.*

And, for the most part, people did. The Gorgon was not a popular creature throughout the Middle Ages. She came back to life during the Renaissance as an interesting image that had a particular resonance in the popular mind. But it wasn't until the eighteenth century, when the study of mythology as a science began in earnest, that people turned once again to trying to account for the Gorgon. And thus we enter the modern era of interpretation.

I am as struck by the modern need to try to explain the Gorgon as I am by the ancient call to disbelieve in her. With this book, of course, I am as guilty of curiosity and of attempting ingenious explanations as anyone. My question is why the Gorgon should attract all of this interest. There has been far less energy expended in trying to explain hundred-eyed Argus, or three-headed Cerberus, or the half-snake Typhon, or Cecrops. Yet all of these beings are as "photogenic" as Medusa. The Gorgon just seems to belong to a certain class of mythological creatures that are well known to the lay public and intriguingly odd in appearance. She thus shares with the Cyclops, the Centaur, and the Minotaur both wide recognition and multiple attempts to explain her.

The idea that the head of the Gorgon represents thunder and lightning was raised several times in the nineteenth century. It was suggested by Furtwängler in his article in W Roscher's monumental *Lexicon* of mythology. Roscher himself championed it in his book *Die Gorgonen und Verwandtes*. J. F. Lauer, F. L. W Schwartz, and C. Dilthey also supported this interpretation. In fact, though, this sounds more like a straightforward reading of Homer than an independent conclusion. In *The Iliad*, the aegis of Zeus is associated with the stormcloud. The Gorgoneion is the centerpiece of the aegis, of course, so it seems logical to conclude that the head of the Gorgon must be the stormcloud.

By itself, this reasoning may seem a little thin, so people have looked for something to bolster the argument. Quintus Smyrnaeus compared the clash of the aegis to the boom of thunder, but Quintus Smyrnaeus wrote in the fourth century C.E., so what he says doesn't necessarily reflect the views of Homer.

Roscher used new etymological discoveries to support his view. He claimed the word *gorgon* derives ultimately from the Sanskrit *garj*, a word for "noise" that he equated with thunder. In this century Thalia Phyllies Howe (later Thalia Feldman) noted that, while it was true that *gorgon* derived from *garj*, *garj* did not mean anything like

“thunder.” It was, however, related to a host of other interesting words—*gargle*, *gurgle*, and the French *garguille*, which ultimately *became* *gargoyle*.

Roscher pointed out the black garments of the Eumenides, those Furies who are parallels of the Gorgons, and likened them to lowering stormclouds, though such an assertion seems a bit of a stretch. Finally, he noted that many passages from literature that refer to lightning might equally be applied to the flashing of the staring eyes that are so important a part of the Gorgon’s makeup. Feldman [Howe] wrote that this was an overinterpretation of the evidence, that the apparent equation of flashing eyes with lightning was a feature of northern European languages and didn’t reflect the linguistic situation in Greece at all. I have to point out, however, that many of the Gorgon parallels around the world also have had their eyes likened to lightning, and I wonder if Roscher and his coauthors were not onto something.

But explaining the Gorgon as the stormcloud seems very limited and ultimately unsatisfying. Not that elements of the lightning and thunder couldn’t be present in the Gorgon, but the stormcloud doesn’t adequately explain the features of the Gorgon or its mythology. Certainly it doesn’t seem to account for the coincidence of Gorgon parallels around the world.

One example of an explanation that does convincingly account for the particular form of the Gorgon is the suggestion that it is modeled after the lion. This idea was raised by K. Gerojannis and P. Walters in the last century and, more recently, by C. Blinkenberg and by Bernard Goldman. The reasoning is straightforward—the Gorgon *looks* like a lion. Such an identification immediately accounts for the fangs and the curly locks with beard, which is simply the lion’s mane. The protruding tongue is familiar to anyone who has watched lions, or any cat, for that matter. The broad nose is simply a conflation of the lion’s nose with a man’s.⁵

In this case the Gorgon parallels support the hypothesis—look at how many of them are held to derive from lions. Simhamukka (“lion face”) as an alternate name for the Kirtimukha in India, the “tiger’s mask” name for the T’ao-T’ieh of China, the Simha stakes in Indonesia, the jaguar god faces of Yucatan, all point to a feline ancestry. In Egypt, Bes seems to have many feline features, including the ears. David Ulansey feels that the lion-headed god of Mithraic iconography is derived from the Gorgon, which would, if his theory were correct, be a case of a true circular return to origins.

Against this explanation, I note that the Gorgon ought to look even more leonine. Except for Bes, the Gorgon and all its parallels have

very human ears, often accentuated with earrings. At best, the Gorgon and its parallels seem to be mixtures, to varying degrees, of beast and human.

Both T. Zell and J. Facius believed that the inspiration for the Gorgon was a different sort of beast. Independently of one another, each suggested that at the root of it all was the gorilla—a hairy beast, out of Africa, with the characteristic fangs and very human ears. The gorilla wasn't officially recognized by European science until a couple of hundred years ago. It is conceivable that its skin could have hung in Rome as late as the last century of the republic and not have been recognized. I could add that the baleful glare of the Gorgon finds a sort of echo in the threatening stare of the gorilla. To an ape, the stare coupled with bared teeth is a threat of the highest order.

Against the gorilla interpretation, I have to note that gorillas make no tongue gesture comparable to the Gorgon's, and that the Gorgon's broad nose doesn't look like the ultra-pug nose of the ape. This proves nothing, of course—the nose could easily have been distorted by an artist's natural impulses to fashion a human-seeming nose. Or artists could have combined anthropoid and feline features to create the Gorgon face.

I have already noted, in [Chapter 3](#), William Ridgeway's interpretation of the aegis as a sheepskin hung over the body of a warrior, with the sheep's head forming the head of the Gorgon.

Many authors take the tack that the Gorgon represented the personification of Fear. This, in fact, was one of the earliest of the modern theories of the Gorgon. Levenzow proposed in 1832 that the Gorgon represented fear of animals. To Volcker it represented fear of the sea. To Otthi it represented fear of volcanic eruptions, while to Hay it was fear of the empty wastes of Libya. Thalia Howe Feldman saw in the face of the Gorgon fear of the unknown and of darkness, its protruding tongue representing the inarticulate moans and sounds of the night. To others the Gorgon represented nightmares. Any or all of these theories may be correct, but they still do not explain the particular form of the Gorgon, or of the myth.

Another school of theories offers meteorological explanations. To A. deGubernatis the face of the Gorgon represented the aurora. One theory, championed by E. R. Gaedeckens in the last century and supported by E. Gerhard and others, is that the Gorgon is the moon, perhaps even the Man in the Moon. Support for this position comes from Plutarch, who calls the face in the moon "hideous," and from the work of the early church father Clement of Alexandria, who noted that the cult of Orpheus in Greece called the moon the Gorgoneion. There is no supporting evidence for Clement's assertion, which is not

surprising. The Orphics were one of the Mystery cults, and, as such, they didn't leave behind full particulars of their beliefs. But whatever they believed, they were hardly what we would call mainstream, and in general most interpretations of the Gorgon, in literature or in art, didn't acknowledge much affinity between the Gorgon and the moon.⁶

The situation is different regarding the sun. There does appear to be artistic evidence linking the face of the Gorgon with the face of the sun. Six and Homoele noted this in the nineteenth century and were echoed by Frothingham and Clark Hopkins in the twentieth. The face of the Gorgon can be found in the midst of zodiacs, as a substitute for Apollo on coins and lamps, and in other situations where one would expect the sun to appear. Turning to the parallels, one can't help but notice that the face of the Aztec sun god on the Calendar Stone is one of the strongest Gorgon parallels. I suspect that the correlation can, in large part, be set down to the *en face* presentation of the Gorgon, which so accurately reproduces the *en face* presentation of the sun.

J. H. Croon's theory explains one aspect of the myth that no other theory does. He believes that the Gorgon was the underworld demon—the beast of Hades from *The Odyssey*—and that it was necessarily associated with the perceived mouths of the underworld. Many of these were hot springs, and he notes with interest that Gorgon coins and images are very often associated with volcanic hot springs. One such place is the island of Seriphos. Croon's is the only theory that tries to account for the association of this otherwise unremarkable, barren island with the myth of Perseus. As he rightly notes, hot springs that were connected with by Greco-Roman culture sometimes have Gorgons associated with them. The springs in Britain at Aqua Sulis were adorned with a very Gorgonic face.

Robert Graves is probably best known today as the author of *I, Claudius* and *Claudius the God*. He wrote several other historical novels but thought of himself mainly as a poet. In addition to all this, he was a mythographer, and his popular book *The Greek Myths* is still in print, along with *The Hebrew Myths* and *The White Goddess*. Graves addressed the matter of the Gorgon briefly in *The Greek Myths* and at greater length in *The White Goddess*. His interpretation is unique.

According to Graves's self-named iconotropic hypothesis, the Gorgon myth is the result of a misinterpretation of an illustration meant to represent something else entirely. The original series of illustrations depicted the gift of the alphabet to Mercury. Graves imagines that the original series looked something like this: In the first picture a naked man stands before three women, the central one of whom presents him with an eye and a tooth, while the outer two point upward at three cranes flying overhead from right to left in a V-formation. (A version of this scene, possibly created by Graves

himself, appears on the cover of *The White Goddess*.) The naked man is Mercury, not Perseus, and he is not depriving the Graiae of their eye and tooth, but rather is receiving the gift of poetic sight, the ability to interpret the omens of birds and to understand the alphabet (the tooth is a divinatory item, which explains the last two gifts). They are being presented by his mother in her aspect as the Triple Goddess.

In the next scene, Mercury stands in a willow grove, wearing winged sandals and holding a sickle, about to cut the twigs that will make up the alphabet. In the next, he stands before three other women in a grove, receiving from them winged sandals, a bag, and a winged helmet. The sandals and helmet represent swiftness of thought (like the winged helmet on American dimes in the first half of the twentieth century, which represented not the god Mercury but freedom of thought), and the bag is to keep the secret of the alphabet hidden.

The maiden surrounded by sea monsters is not the about-to-be-sacrificed Andromeda, but Athena, goddess of wisdom. The face of the Gorgon is reflected in a mirror, protecting Mercury in his flight. Mercury is shown with the eye and tooth drawn on either side, which has been taken by the uninitiated to mean that Perseus was tossing them into Lake Tritonis. He is not being chased by Gorgons, but escorted by women wearing Gorgon masks. The face of the Gorgon peering from his bag is not Medusa's head being carried in the kibisis, but a protective sign, indicating a secret that seals the bag containing the sacred alphabet.

This interpretation is unusually detailed and dazzlingly different from anyone else's. Where did Graves come by this intelligence? Here is where many mythographers part company with Graves. He was a firm believer in what he called analeptic and proleptic thought. The first term refers to the mode of thought Graves put himself into while writing his historical novels and much of his poetry. He immersed himself in the writings, lore, and atmosphere of the historic period he wished to evoke, imagining himself to actually be in that time. This is the right and proper thing for a historical novelist to do. But Graves believed that the insights that came to him in this mode of thought were more than merely consistent images or even possibilities—he believed that this state of mind broke down the walls of the artificial human construct called Time, and that he was thus given glimpses of truths that could not be obtained in any other way. Proleptic thought is analogous to this—the obtaining of facts from the future by a sort of intuitive process that transcends Time to produce insights that aren't accessible to rational thought.

Graves was defensive about this mode of research, claiming that, although it was in common use by poets, historians, physicians, and

others, they did not openly acknowledge it. It looked, he claimed, too much like common guesswork, and once you admitted that you had used such proleptic methods, experts would be prejudiced against your conclusions, no matter how well you supported your result with more orthodox research results. “Though they cannot refute it,” Graves said, “They dare not accept it.”⁷

Graves is quite wrong. Intuition is necessary for any creative mind, and the sources of unusual thoughts and combinations should never be an issue. If Graves thought he was receiving his ideas by radio from the planet Zorkon, that would not invalidate his ideas, provided he could buttress them with appropriate documentation. In fact, though, he does not even try to support his interpretation of the Gorgon myth with any references. He points out some parallels, but these don’t validate his assertions in any way. Nothing at all resembling his imagined protoimages of the myth of Mercury and the Alphabet exists, and it’s hard to reconcile this myth with the archaic images of Perseus and the Gorgons that do exist. Is there any way to square his concept of Athena as Andromeda with the Corinthian black-figure amphora from Berlin? Perseus, Ketos, and Andromeda are named on that vase, and Perseus is clearly fighting off the attacking beast. Graves’s protoimages, then, would have to date from a period much earlier than this piece.

Despite Graves’s stern defense, it is hard for the uninitiated to see this as anything but a case of confusing one’s hopes with reality. Graves is not held in high regard by scholarly mythologists. Nevertheless, as his books are reprinted they continue to promote his views, while the general disapprobation of them is not publicized. His *Greek Myths* is an excellent source book (although not the only one generally available), but its interpretations are permeated with Graves’s analeptic and iconotropic views, and so it must be used with caution.

Perhaps I can’t prove that Graves is wrong, but it is temptingly easy to retort that likewise he cannot—or at least he *has* not—proven his ideas correct. A better response is to provide an alternative hypothesis that has a greater sense of plausibility to it, buttressed as far as possible with correlating facts. This is what I hope to do.

It was probably inevitable that Sigmund Freud would weigh in with his own interpretation of the Gorgon, and that he should see it in sexual terms. His extremely brief essay, “Das Medusenhaupt” (“The Head of Medusa”), is probably only a preliminary effort that Freud intended to flesh out considerably. It was not published until after his death.

Influenced in large part by the naming of the Oedipus complex and

by his book *Moses and Monotheism*, we tend to see Freud as deeply interested in mythology, but he begins this essay: “We have not often attempted to interpret individual mythological themes, but an interpretation suggests itself easily in the case of the horrifying decapitated head of Medusa.”

Freud saw in the Gorgon head an obvious symbol of castration. Decapitation, according to him, is associated in the mind with castration, and the snakes that make up Medusa’s hair are symbols of castration, albeit in a roundabout way: “This is a confirmation of the technical rule according to which a multiplication of penis symbols signifies castration.” The fact that the sight of the Gorgon turns the observer to stone, stiffening him like an erection, offers consolation, since it reassures him that he has a penis. Yet this castration symbol is placed on the chest of Athena, a female goddess, rendering her unapproachable. Freud saw it as inevitable that a “homosexual culture” like that of the Greeks would represent a woman as frightening because she is castrated.

Freud was actually anticipated somewhat by Richard Payne Knight, who in 1876 wrote that Medusa’s head signified both destruction and reproduction as a symbol of female generative power. Freud’s followers Sandor Ferenczi and J. C. Flugel each wrote essays elaborating upon the theme. The Medusa’s head is a symbol of female genitals without a penis; it harks back specifically to the genitals of one’s mother. Freud’s student and biographer Ernest Jones believed the Medusa head to be not only phallic, but also a fecal fertilizing sign, based upon the work of Aristophanes.

More recent writers have tried to reinterpret the image in different ways. Why, asks Philip Slater, should the virgin goddess Athena display the genitals of the Mother? Slater thinks that the Greeks believed they could only expect kindness from a female as long as she remained a virgin, and that the genital-Medusa on the aegis served as a reminder of the vindictive Hera. Furthermore, he believes the snakes are not compensatory, but are the source of the fear, representing the vagina itself. It is not the fear of a castrated Mother he sees in the Gorgon, but of a castrating Mother.

Klaus Thelewit feels the same way. “It’s not because it’s been bitten that the ‘Medusa’s head’ is so terrifying, but because the head itself can bite. ... It is in no sense, as Freud thinks, the castrated genitals of the mother that she displays as a deterrent; it is the symbol (attached to her by men themselves!) of man’s fear of her uncastrated, horrifying sexual potency.”⁸

Arthur Miller, based on his examination of cases in which the patients themselves drew attention to the figure of the Gorgon in

dreams, saw no connection with a castration complex. Instead, these experiences and an examination of the original myths led him to believe that the origin of the Gorgon was competition between women—between goddess and mortal, possibly mirroring a mother-daughter conflict.

More recently, Freud's ideas have been given quite a different twist. Jean Clair, too, believes that the Gorgon is "a vulva visualized as a face, or even better, as a face in the shape of a vulva. Baubo, by contrast, is the face sensualized, a face made into a vagina, genitalia humanized by being made into a face." To Clair, Medusa is a taboo figure, but not a castrating threat. Some have carried this idea further to make the Gorgon a benevolent goddess herself. The notion was first voiced by Otto Jahn in 1851 and by Mayer before the turn of the century. Both maintained that the Gorgon represented the darker side of Athena (and that this is the reason she wears its face on her aegis).

In 1911 A. L. Frothingham, in a very influential paper, noted the parallels between Medusa and the Great Mother, as well as between Medusa and the sun. He noted the incongruity of placing the Gorgon's face at the center of a lamp, or on a child's swaddling cloth. More important for his thesis, he noted that the appearance of the Gorgon in a central position, flanked by lions, on the friezes of temples at Miletus and Corcyra indicated her identification with the Mistress of Animals. A preserved plate from Cameirus shows a Gorgon head atop a winged female figure carrying geese, her legs in the characteristic pose of Artemis as Mistress of Animals. Another piece he does not mention might also support this theory. It is a bronze chariot front, now in the museum Antiker Kleinkunst in Munich, showing a very Gorgonlike female posed spread-legged between lions.

Jocelyn Woodward, in her book on Perseus in art, comments that the Corcyra frieze "takes us back to a time long before these Gorgon-figures were identified with the creatures of the Perseus legend. With her attendant lions, she embodies the great Nature Spirit of primitive belief, who appears in early Asiatic and Ionic works of art as a goddess." In response, Erich Neumann notes: "Without pausing to comment on this passage, we can take it that the identity of the Gorgon dispatched by Perseus, and the figure of the Great Mother who rules over wild animals, is proven, even for investigators not familiar with the real background of the myth." Certainly that is the attitude of Graves, who like Jahn saw her as one aspect of Athena. Through him, and through such followers as Barbara Walker, the concept has become widespread and virtually unquestioned.

I, for one, think it is well worth questioning. Direct evidence that Medusa was ever meant to be an aspect of a Mother Goddess is actually very slim. Her presence on the frieze of the temples does not

necessarily herald her as a goddess. In fact, the presence of Pegasus and Chrysaor on the Corcyra temple clearly shows that this artwork inhabits the realm of extant myth, rather than a period before the current myths evolved. No one claims any longer that the presence of the Gorgon shows these to have been her temples. Even today it is rare for the deity of a shrine to be depicted over the entrance. In [Chapter 9](#) I will propose a very different explanation for some of the temple appearances of the Gorgon, particularly the Gorgons atop the columns at Corcyra and Miletus.

If Medusa were one aspect of a Mistress of Animals or a Great Mother (the two are not necessarily identical) I think we should expect to see much more proof than the few pieces that have been set forth in support of this identity. There are many sources that portray the Gorgon as an apotropaic guardian or as a monster dispatched by Perseus. Very few support her in this other role—and the Great Mother is vastly more important than the demon of hell or Phobos. We should see many depictions of the demon face of the Great Goddess. But we do not.

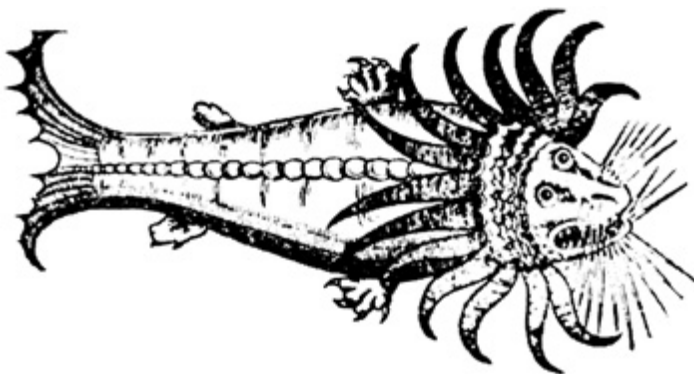
I've saved the best for last. There is one explanation for the Gorgon that is over a hundred years old and has attracted a great many supporters in that time. Most of these theorists seem to have come up with the idea independently (I have found only one who has acknowledged an earlier source for the idea—and that was in a note added in proof). This says a lot about the persuasiveness of the idea; it's also a sobering reminder that it's a good idea to check the literature thoroughly.

The theory first seems to have been proposed by W Roscher in his 1896 review on the Gorgon in the *Lexicon*, but the idea was given a much fuller treatment by F. T. Elworthy in 1903 in “A Solution of the Gorgon Myth.” “Is it possible that anything can be said upon this old-world subject, that has not been considered and well thrashed out over and over again?” Elworthy asks at the outset of his work. Noting that the Gorgons seemed to live near the ocean, and that the places where the story was current were all in the Mediterranean region, he wonders whether it was possible that the disembodied head with its snaky hair and staring eyes might not be inspired by the squid and octopus. Placed in the proper orientation, the head of an octopus, with its startlingly human eyes (a textbook example of convergent evolution) and its tentacles standing in for the thick, ropy curls depicted on the forehead of the Gorgon, looks like it might be the perfect model for the Gorgoneion. This would explain why the head was the first element in the myth, and why the Perseus legend was later needed to explain how that head became separated from the body. Elworthy suggests that the parrotlike beak of the octopus might

be responsible for the image of the protruding tongue. Later writers have proposed that the pronounced siphon of the cephalopods, used by the squid for its jet propulsion, might have inspired the tongue, while the parrot-beak became the fangs of the Gorgon. The evolution from thick locks of hair to snakes is perfectly understandable if the snakes derive from the tentacles of an octopus or squid.

Elworthy writes about the beard only in passing and does not try to account for it. But there is a telling parallel from the work of the sixteenth-century Swedish archbishop Olaus Magnus, whose description of the Kraken (now widely believed to be a giant squid) paints it in these terms: “Their heads [are] square, all set with prickles, and they have sharp and long horns round about, like a tree rooted up by the roots ... having heirs [*sic*] like goose-feathers, thick and long, like a beard hanging down.” Magnus also emphasized the huge eyes. When an artist tried to reconstitute the creature from this description, he drew a fish body (since it was, after all, a sea creature) with a lionlike head, mane, whiskers, staring eyes, and teeth. So it’s entirely conceivable that a combination of second-hand description and unsupervised artistry could produce a very Gorgonlike figure from a cephalopod.

Elworthy believed that many of the fleurets and architectural flourishes on Greek vase paintings and buildings are actually unrecognized drawings of stylized octopus and squid. After Elworthy read his paper at the meeting of the Folk-Lore Society in London in December 1902, he was approached by people wanting to point out parallels. He mentions these in his postscript to the printed article, listing heads from Nineveh, Peru, and New Zealand. Even though all these places are far from the Mediterranean, he noted, their inhabitants were people who would have knowledge of octopus or squid.



5.2 *Illustration of the Kraken from Konrad Gesner's 1558 book Historia Animalium, based upon the description by Olaus Magnus, aided by the*

artist's imagination. The tentacles have become a beard, and the creature has come to resemble a lion's head on a fish body. Anyone unaware of the history would be hard pressed to reconstitute the original octopus/squid form.

In 1913 L. Siret suggested independently that the face was that of a cuttlefish. Psychoanalyst Jacques Schnier, writing in *American Imago* in 1956, again proposed the octopus, tying his explanation to Freud's. Science writer Willy Ley also suggested that the octopus lay behind the Gorgon, using the same arguments as Elworthy. (Ley also suggested that Scylla, the many-headed monster that attacked the ship of Odysseus, was another manifestation of the octopus.) H. J. Rose, in his *Handbook of Greek Mythology*, notes that G. H. Green also supported the octopus as the inspiration for the Gorgon.

Probably the most extensive theory is one put forward by Jerome Y. Lettvin, now professor emeritus at the Massachusetts Institute of Technology. His article "The Gorgon's Eye" appeared in 1977 and has been anthologized once since then. Lettvin has written several chapters on the subject for a book tentatively to be called *The Head on the Shield of Pallas*, but this work has not been finished. Dr. Lettvin informs me that it probably will not be published, so the additional information I give here might be the only place it will see print.

Lettvin's theories go far beyond the resemblance of the cephalopod to a disembodied head. He draws attention to the parallels between the properties of the gifts Perseus receives and the characteristics of cephalopods. The squid, he notes, is very common in the Mediterranean. If you cut off the head (and a squid is not "all head"), what is left resembles a sandal with wings at the toes, just like the flying sandals of Hermes, or those the Nymphs gave to Perseus. The allusion to flying is not at all inappropriate—squid can make great leaps out of the water, seeming to "fly" for distances of up to thirty feet. They accomplish this with a burst of water through their siphons, jetting into the air in their swimming formation to avoid predatory fish. Aristotle was well aware of the flying ability of squid and commented on it. Why should the Greeks of a few centuries earlier not have known also?

The helmet of invisibility also has its counterpart in the cuttlefish, which can become invisible against its background through its ability to change color and patterning in a fraction of a second. Lettvin notes that the legend does not say that the helmet made the wearer *transparent*, for which the Greeks had a perfectly serviceable word, but *invisible*, which is an appropriate word for the ability to match one's color and pattern with one's background. The helmet of Athena, he

notes, has the shape of a cuttlefish that has had its head removed. Even the nosepiece of the helmet bears this out.

Finally, Lettvin sees a parallel between the octopus and the kibisis, the pouch given to Perseus, which he identifies with the magical purse that can hold whatever is put into it without growing larger itself. “I myself have given an octopus many crabs, one after the other,” he notes, “an aggregate much greater in size than the body of the octopus itself, and every one vanishes under the creature and the octopus never grows larger.” The octopus manages this trick by paralyzing its prey with its saliva, which then liquefies the soft parts of the crab. The octopus sips the fluid and stores it under its interbrachial membrane (the “webbing” between its arms). The storage capacity of the interbrachial membrane is much greater than that of the octopus’s mantle, or body.

Squid, cuttlefish, and octopus are three different cephalopods, the three littoral species to be found in the Mediterranean. It is not surprising that each would represent a different gift to Perseus. Lettvin also thinks that the three different species explain the three Gorgon sisters and their names. Euryale (“widely leaping”) refers to the squid, whose leaps can take it flying into the air. Stheno (the “strong”) is the cuttlefish with its tenacious grip, which is due both to muscular strength and to claws built into the tentacles. Medusa (“queen”) is the octopus. The octopus is singled out for this exalted title because it is the most intelligent of the three—the most intelligent invertebrate, in fact. Lettvin, who has worked with octopodes,⁹ recounts stories of their intelligence, cunning, and personality. Octopodes, he says, lie in wait to ambush their prey, lay clever traps, and have good memories. They will play pranks on the humans who come in contact with them.

Lettvin points out the description of the Gorgons as having “beautiful cheeks”¹⁰ and asks, What animals have beautiful cheeks? The mantle of the octopus forms the “cheeks” of the Gorgon face, and its ability to change color makes them beautiful. This analogy is particularly apt, because the octopus “breathes” underwater, so its cheeks expand and contract just as human cheeks do.

The ability of the Graiae to exchange eye and tooth finds a fascinating parallel in the behavior of the octopus. The octopus lacks a bony skeleton, so its eye does not lie in an orbit of the skull, as the human eye does. Instead, it is backed up by a vascular sinus. When two male octopodes meet, they fight for territory in an unusual way. The “attacker” will inflate this sinus, increasing the apparent size of his eye until it seems about four times its original size. The “defender” will then do the same as the attacker’s sinus deflates. The battle goes on until the loser retreats. When an actual “hands-on” battle ensues, the octopodes entwine arms and alternately poke their parrotlike

beaks at one another.

Lettvin believes that the Graiae correspond to pelagic cephalopods—those dwelling in the deep ocean rather than the shallow waters of the coastal Mediterranean. These creatures are generally less vivid in color and so could reasonably be called “the gray ones.” Even these species can have a surprising appearance, however; at least one such squid is adorned with phosphorescent spots. When the squid is pulled from the sea and placed in a bucket, the flickering display of activated spots plays over its skin, looking like city lights as seen from the air.

The protruding tongue so characteristic of the Gorgon finds its inspiration in the octopus’s siphon, as mentioned above. The siphon is the cylindrical tube through which the octopus expels water that has been first sucked in through lateral valves. It provides the cephalopod with its “jet propulsion.” A similar organ in the squid allows it to leap free of the water for considerable distances. The siphon is a highly mobile organ and can be directed with great accuracy, just like a human tongue.

Finally, the ability of the Gorgon to petrify its victims has an exact parallel in the behavior of the octopus and its prey. If you place a crab in a tank containing an octopus that is apparently asleep, the crab will continue to walk around until the eye of the octopus opens, at which point the crab will freeze in place. The octopus can see and eat a moving crab, but a motionless crab can, like the octopus, blend into the background and become invisible.

There is even a parallel between cephalopods and the myth of the miraculous birth of Chrysaor and Pegasus. Lettvin notes that the main predator for octopus (aside from humans) is the moray eel. Moray eels respond strongly to the scent/taste of octopus, an effect that can be seen in the laboratory if water from an octopus tank is poured into a tank containing an eel.

In addition to its ability to jet away through the water, the octopus can secrete an inky fluid, which not only obscures vision, but also saturates the surrounding water with its scent, further confusing the predator about the location of the octopus. In the confusion generated by the ink cloud, the octopus often escapes. Other creatures find this cloud of octopus ink confusing and even irritating and flee the vicinity as well. The last to leave, because it is the slowest swimmer, is the seahorse. The dark cloud of ink coming from the octopus is thus like a dark stormcloud emanating from the head of the Gorgon. The last things to emerge from this are the moray eel, with its golden, sword-like body, and the seahorse, with its horselike face, its Pegasus “wings,” and a fishtail as is sometimes seen on winged horses (Lettvin cites Venetian art).

These parallels between the octopus and the Gorgon are easily observed by modern scientists, who can keep the cephalopods in glass-sided tanks. I asked Lettvin if it was possible that ancient Greek fishermen were aware of the same facts. He assured me that it was. Lettvin did his work with octopodes while living in Naples, Italy. The fishermen and sponge divers there were perfectly aware of the traits of the octopodes from firsthand experience. Since the cephalopods were littoral creatures, living in shallow waters and rocky tidal pools along the shore, it would not have been at all difficult for the ancient Greeks to observe their behavior.

Unfortunately, Lettvin says, the Mediterranean today is “overfished” and is “practically a dead sea.” The numbers and varieties of marine life that would have been known in ancient times are greatly reduced, and many species have vanished completely. It is much harder today to imagine the creatures and behaviors that could have contributed to the rich body of Greek mythology. There is more to Lettvin’s explanation, but it is of a very different nature and involves astronomical symbolism, which we will get to in the next section.

What I have covered here includes most major theories on the origins of the Gorgon. The list is by no means complete—I am perpetually uncovering new theories or new wrinkles on old theories. Nevertheless, I have found most of these theories not entirely convincing (although I was, for a long time, convinced that the cephalopod theory came closest to the truth). It was while researching the cephalopod theory, in fact, that I came across different explanations for the origin and use of the Gorgon that I had not seen before—explanations for why the Gorgon looks as it does, why it is used on shields and antefixes, why it is an apotropaic device. I finally thought I could see different reasons for the genealogy of the Gorgons and the Graiae, the reason Perseus uses a curved sword, why he was born of a golden shower, why there are three Gorgons and three Graiae, and why only Medusa is mortal. At last, I thought, I had found an explanation for why the image of the Gorgon seems to be so widespread. Before I begin, however, it will be necessary to take a slight detour through the history of a branch of astronomy.

PART II: THE SOLUTION

MIRA AND ALGOL

“Mira—Sinus—names of stars, are they not, O sheik?” asked Ben-Hur, going to each of the four, and to the sire, offering his hand.

“And why not?” replied Ilderim. “Wert thou ever abroad on the desert at night?”

“No.”

“Then thou canst not know how much we Arabs depend upon the stars. We borrow their names in gratitude, and give them in love. My fathers all had their Miras, as I have mine; and these children are stars no less.”

—Lew Wallace,
Ben-Hur: A Tale of the Christ, 1880

THE LINES IN THE EPIGRAPH ABOVE are drawn from the section in Lew Wallace’s epic novel in which Judah Ben-Hur, returning to Jerusalem and his showdown with boyhood-friend-turned-nemesis Marcellus, stops at the oasis and meets Sheikh Ilderim. The sheikh, elated to discover that Ben-Hur has raced at the Circus Maximus in Rome, eagerly shows off his white horses, all named for the stars.

The historical research of Wallace, the former Civil War general and western governor, is impressive. He has captured the mood and the feel of a long-ago era. His vocabulary and dramatic choices may feel a little Victorian to someone raised at the end of the twentieth century—what modern novelist would choose to make Balthazar, one of the Three Magi, a major character in a novel set during the ministry of Christ?—but the liveliness of his action makes up for it. Who before Wallace had ever tried to depict a Roman chariot race in such vivid detail? Nevertheless, despite his thorough research, he got things slightly wrong in this scene with the sheikh.

The modern name of the star Mira is omicron Ceti, the designation given it by Johannes Bayer in his 1603 star atlas, the *Uranometria*. Oddly enough, Omicron Ceti is also the older of the two names, because “Mira” was not applied to the star until thirty-five years later, in the *Historiola della Mira Stellae* of Helvetius. In other words, Sheikh Ilderim called his horse after a star that would not bear that name for another 1,600 years.

Wallace can be forgiven his error. Mira, after all, is one name for

the star, and it certainly looks older and less “scientific” than omicron Ceti. Furthermore, the name is Latin, as we should expect in a novel set during the Roman Empire. We don’t know what the Romans or the Greeks called Mira. It’s not even mentioned in the great ancient register of stars, the *Syntaxis* of Claudius Ptolemy.

Mira means “wonderful” or “miraculous,” and there is good reason to give that name to this particular star, since it does have a remarkable property. The story of how the features of Mira and the star Algol were discovered will take us on a detour from the study of the Gorgon, but the story is important to understanding what I believe to be one of the foundations of the myth of Perseus. Besides this, the tale is interesting in its own right, and I don’t think it has ever been fully set down in a popular text.¹

David Fabricius, born at Esena in 1564, was a Lutheran clergyman, first at Resterhave, then at Osteel in East Friesland in Holland. By the beginning of the seventeenth century he had also become one of the best observational astronomers in Europe. He was in constant communication with Johannes Kepler, who considered Fabricius second only to Tycho Brahe as an astronomer. This was high praise, since Brahe is still generally acknowledged as the greatest observational astronomer. Fabricius spent time at Brahe’s own observatory, and Fabricius’s son Johann was the first observer of sun spots, independent of Galileo.

On the evening of August 13, 1596, Fabricius was looking at the constellation Cetus and noted something very peculiar: the normally dim, reddish star that should have been near the center of it wasn’t there anymore. On repeated viewings he still failed to find the star. Fabricius, excited, wrote about it to Kepler, his constant correspondent, and his antidiscovery was published. Curiously, he does not seem to have looked for the star again, because it does not reappear in his writings. Fabricius continued as minister and astronomer at Osteel until May 7, 1617, when he was killed by one of his own parishioners, who he accused of stealing a goose.

But the star that disappeared had, in time, reappeared. The next person to notice it was Johannes Bayer, who named it in his *Uranometria*. Bayer’s system, which is the one still in use today, was to name the stars by using a Greek letter to indicate its relative brightness in the constellation, followed by the possessive form of the name of the constellation the star appeared in. Thus, alpha Ceti was “alpha of the constellation Cetus,” the brightest star on the constellation. Mira was called omicron Ceti. Omicron is the fifteenth letter of the Greek alphabet, indicating that the star was pretty dim when Bayer saw it. In modern reckoning, it was fourth magnitude, on a scale where first magnitude is brightest and fourth magnitude is

about the limit of visibility in a modern urban setting. Bayer saw nothing unusual about the dim reddish star, but at least it had finally been given a name.

The properties of Mira were first noted by another Dutch astronomer, Phocylides Holwarda, in 1638. On December 16 of that year he was preparing for an observation of a lunar eclipse by measuring the altitudes of various stars when he noticed that there seemed to be an unusually bright star in the constellation Cetus. He noticed it again several days later when confirming his measurements. This new star was in the same place as omicron Ceti, but it was clearly brighter than the nearby third-magnitude stars, whereas omicron Ceti was supposed to be fourth magnitude. On the advice of a professor of mathematics, Holwarda began a regular study of the star. Over the course of the next year it dimmed and vanished, but it reappeared on November 7, 1639. Holwarda was able to show that this was not a new star, but occupied exactly the same position as the old star. He had discovered the first variable star.

It is often said that Aristotle held that nothing in the heavens ever changed, and that any apparent variations in the heavens must be due to events taking place in the region below the moon—the “sublunary sphere.” Aristotle never actually says this in any of his existing writings, but his followers were eager enough to push the concept. By the Middle Ages it had worked its way into an overall philosophy of the heavens, in which the regions beyond the moon were composed of perfect, unvarying material, in contrast to the corrupt and sinful matter of the earth. Astronomy thus found itself straitjacketed at the start of the modern era. The great nova of 1054 that produced the Crab Nebula was not even recorded in Europe (though Chinese records refer to it), possibly because theory triumphed over observation. The temper of the times had changed by November 11, 1572, when the then-young Tycho Brahe observed the bright new star in the constellation Cassiopeia. His 1573 book, *De Nova Stella (On the New Star)* documented the phenomenon and introduced the word *nova* into the language of astronomy.

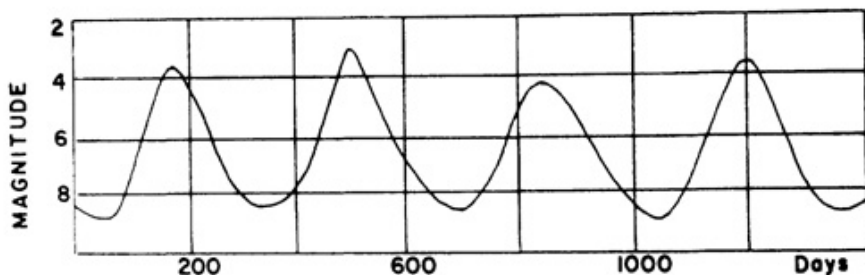
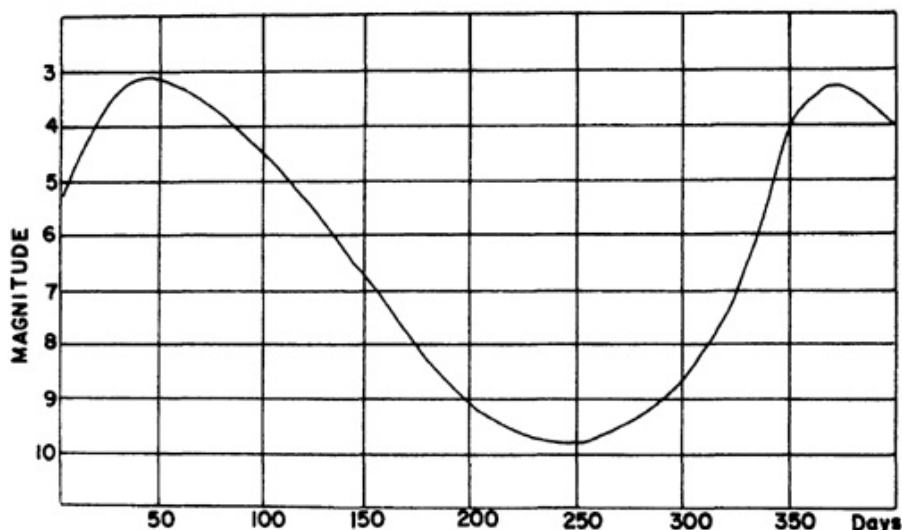
By 1639, then, Europe was ready for new things in the sky. Johannes Hevelius (whose original Polish name, distinguishable under his Latin *nomen*, was Heweliusza) of Gdansk produced the *Historiola della Mira Stellae (Little History of the Wonderful Star)* to describe the discovery.

Continued observations showed that the star had a somewhat irregular interval of about 330 days between maxima, but the period varied, as did the amplitude. In 1779 the star blazed to first magnitude, putting it among the ranks of the brightest in the sky. The astronomer Bullialdus (Ismael Boulliau) suggested that the variations

occurred because Mira had spots like the ones the younger Fabricius had discovered on our own sun. As the star rotated, sections having more spots came into view and the star appeared dimmer. The rotation of the star accounted for the mostly regular period, but the appearance and disappearance of spots caused the variations in period and brightness.

This explanation is ingenious, but unfortunately, it is not correct. Mira is what is today called a long-period variable. It is a red giant with a faint blue-white companion, and the variations in its brightness are related to changes in the size of the star. Mira expands and contracts like a balloon, getting brighter as it gets larger. It is this process, rather than patterning of sunspots, that causes the variations in the period and intensity of Mira's brightness. Such long-period variables are now called Mira-type, and they form the largest class of variable stars in the sky, currently numbering about four thousand.

MIRA — AN IDEALIZED LIGHT CURVE



MIRA — A Typical Four-year Light Curve

6.1a (top) & b (bottom) *Light curves of the variable star Mira (omicron Ceti). A light curve plots the intensity of the star as a function of time. The upper plot shows the variation over a 1400 day period, showing several cycles. The lower curve is a composite “ideal” curve showing the variation over a single 331 day cycle. Reprinted from Burnham’s Celestial Handbook (1978) by Robert Burnham, Jr. by permission of Dover Publications.*

After Hevelius published his discovery, astronomers started looking for other such variable stars. For the next thirty years they had little success. Then, around 1667, Geminiano Montanari of Bologna found that the star called Algol in the constellation Perseus also disappeared. Montanari reported his observations in “Sopra la sparizione d’alcune stelle e altre novita celesti” in *Prose di Signore Academici Gelati di Bologna* in 1671. What he had to say was tantalizing, though brief. The star was, he said, subject to frequent mutations. Normally it seemed to be third magnitude, but in 1667 he saw it decrease to fourth magnitude. In 1669 it increased to its original strength and beyond, attaining second magnitude, but the next year it dropped back to fourth magnitude again. Montanari died not long after composing his report, but his observations on the variability of Algol were confirmed sixty years later by Maraldi and by Christfried Kirch. Curiously, no one thought to try to measure the actual period of variation until 1782. That year three men measured it simultaneously.

The man usually given credit for determining the period of Algol (and therefore, in most minds, of truly discovering its variability) was an extraordinary individual named John Goodricke. Goodricke was born in 1764 to a well-to-do family at Ribston Hall near Wetherby in Yorkshire, England. His family was heir to a baronetcy and served Britain in a diplomatic capacity John’s grandfather was envoy extraordinary at Stockholm and a privy councillor to George III; his father, Henry, served in Groningen, Holland, where he met his bride, Levina Sessler. Of their five children to survive infancy, John was born deaf.

John Goodricke was fortunate to live in a wealthy and enlightened family. At the age of eight, he was sent to the academy of Thomas Braidwood in Edinburgh. Braidwood was a man ahead of his time, using new methods to teach his deaf students to read lips and to speak, as well as teaching them to read and write. In 1778 John was enrolled at a regular academy in Warrington, England. Upon completion of his studies, he returned to his parents, who were now living on the family estate at York.

Living nearby were the Pigotts, Nathaniel and his son Edward.

Both were astronomers. Nathaniel was a member of the Royal Society of London, the Brussels Academy, and the Paris Academy of Science, and he corresponded regularly with William Herschel and Nevil Maskelyne, the royal astronomer at Greenwich. The Piggots moved to York in 1780 and began acquiring the latest instruments. Edward made his first observations there in the autumn of 1781.

It seems that a relationship developed almost immediately between Edward Pigott and John Goodricke. Goodricke kept a journal of his observations, and the very first is dated November 16, 1781: "Mr. E. Piggot [sic] told me that at 9 o'clock P.M. yesterday he discovered a Comet." Pigott, for his part, had complained to Herschel that there was no one to converse with in York. Sharing a common interest in astronomy and a common boredom with York, the two young men started performing observations at their own telescopes, then comparing notes and opinions. Goodricke started out as an avid pupil of the older Edward, but they soon became collaborators. Michael Hoskin, who studied their work, commented that:

In their published papers, and more revealingly in their private journals, each gives credit unstintingly to the other, and there is only one trace of a clash between them: on 31 July 1783 they had what Goodricke afterwards described as "too warm a dispute." ... The next day Goodricke noted that Pigott had justice on his side and that the record on the previous page ought to be "blotted out of the Journal." It is amusing to picture this heated argument, presumably conducted through pencilled notes of ever-increasing bluntness!²

In the course of their observations, Goodricke and Pigott studied variable stars, observing known variables and searching for new ones. Goodricke observed Mira from August through October 1782. On October 23, Pigott directed Goodricke's attention to Algol, noting that "this star is variable." The study of variable stars looked promising. Montanari claimed to have found a hundred such stars. Goodricke made up a list of possible variables and started watching them. He observed Algol on October 24 and 29 and on November 1 and 7 but didn't see anything to excite his interest. On November 12, however, he was surprised to find that the normally second-magnitude star was of only fourth magnitude. He observed it for an hour and found that it remained very dim. He thought perhaps this was an optical illusion, or a problem with his eyes (how shocking that thought must have been for a deaf man!), or that the dimness might be due to "bad air." On the next night both Pigott and Goodricke observed Algol and found it was once again a second-magnitude star.

At that time the only measured examples of variable stars were Mira, with its eleven-month period, and Chi Cygni and R Hydrae, which were also long-period variables. The two astronomers must have been expecting Algol to have a similarly long period. When, instead, Goodricke saw that Algol was back to second magnitude only one night after he recorded its dimming, he must have been sure something was wrong with the previous evening's observations. But perhaps a seed of doubt was introduced. Both men continued to observe Algol over the next month. On December 28, they saw Algol change significantly in brightness within a very short period. In a note to Goodricke, Pigott suggested that the only thing that could cause so abrupt a change in brightness could be an eclipse: "The opinion I suggested was, that the alteration of Algol's brightness was maybe occasioned, by a Planet, of about half its size, revolving around him, and therefore does sometimes eclipse him partially."³

Goodricke also noted this suggestion in his journal. The two continued to observe the stars, and by the end of January 1783, Goodricke had come to believe that the period of Algol must be far shorter than that of Mira—only about seventeen days. He continued to accumulate evidence, and by the middle of April became convinced that the period was incredibly short—only two days, twenty hours, and forty-five minutes.

Pigott searched the earlier literature but could find no record that Montanari or Maraldi had actually measured the period. He wrote to Maskelyne, the royal astronomer, and asked him to pass the word to Herschel about the discovery. Word quickly spread to the scientific community in London. On May 12 Goodricke wrote a long letter detailing his work to the Reverend Anthony Shepherd, the Plumian Professor at Cambridge, who read the letter at the usual meeting of the Royal Society in London. Pigott is not mentioned except as confirming Goodricke's observations, and from the relationship between the men, it is clear that he stepped aside and let his young protégé take full credit for the discovery and for their shared theories about the variation. Goodricke mentions both the eclipse hypothesis for the variation and a sunspot theory that resembled Bullialdus's theory for the variability of Mira. Perhaps he did so because Herschel distrusted the eclipse hypothesis—no one had been able to detect a companion to Algol. So John Goodricke and Edward Pigott were two of the first astronomers to quantify and attempt to explain the variability of Algol.

The very next article to appear in the *Journal of the Royal Society* also concerned the measurement of the period of Algol—but it had nothing to do with Goodricke or Pigott. It was written by someone working independently and reaching the same conclusions. Johann

Georg Palitzsch is a man who has been unfairly lost in the history of science. He does not even rate a mention in the *Dictionary of Scientific Biography*, although he is the man who was the first to observe the predicted return of Halley's comet after Edmund Halley had made his prediction of its seventy-six-year period.⁴

Palitzsch was born on June n, 1723, in Prohlis, near Dresden in Saxony. Unlike Goodricke, he was an only child, the son of a farmer. At the age of twenty-one he married and assumed responsibility for the family farm. He learned his astronomy from books until he met Christian Gartner, a yarn merchant by profession and an astronomer by night. Gartner manufactured his own optical instruments, and Palitzsch soon wanted his own. Gartner, who was politically well connected, introduced Palitzsch to the inspector of the electoral cabinet of Saxony, who taught Palitzsch how to use observing equipment.

On Christmas night in 1758, Palitzsch was observing the stars at about 6:00 P.M. Oddly enough, he was looking at Mira: "I observed the stars with my eight-foot tube to look after the now bright star in Cetus, and also to see whether the comet, whose coming was announced long ago and which was eagerly awaited, had arrived and made itself visible." The spot of light he saw between the stars Epsilon Piscium and Delta Piscium moved to a different location the next night, confirming its identity as a comet. Palitzsch told his friend Gotthold Hoffman, a professor of mathematics at Dresden, who confirmed the discovery and announced it in January in the local newspaper, the *Dresdenische Gelehrte Anzeigen*. Palitzsch himself did not claim the discovery at the time, probably because there had been so many false alarms. Observations of comets in September 1757 and May 1758 (both by Palitzsch's friend Gartner) had proven not to be Halley's comet, so Palitzsch's concern was warranted. The comet that Palitzsch observed was officially recognized as the returning Halley's comet on January 20, 1759, by Gottfried Heinsius, a professor of mathematics at Leipzig.

It's worth taking a moment here to consider just what Palitzsch had done. He was the first to observe the predicted return of a comet. (Halley himself had died in January 1742, sixteen years before the return, and was not able to see that his prediction had come true.) As events clearly show, it had to be the observation of the correct comet, in the right place at the right time. This means that Palitzsch had to work out the time and location. Such mathematical calculations are straightforward, but they are neither easy nor obvious. It is true that Palitzsch was not working in a vacuum—many others were also looking for the return of the comet, and there were many publications dealing with the expected return. Yet Palitzsch should get a

considerable amount of credit for predicting the location of the comet, as well as for his persistence in observation. Nevertheless, he found himself slighted. The Paris Academie Royale des Sciences announced in 1759 that Halley's comet had been rediscovered by "a simple farmer who did not realize the importance of his discovery, accidentally and with the naked eye." The tale became part of astronomical folklore, so that as much as seventy years later the astronomer Wilhelm Olbers felt compelled to set the record straight in the *Berliner Astronomisches Jahrbuch* for 1828.

We have no records to show how Palitzsch made his observations of Algol, or what prompted him to look. (Palitzsch's home was destroyed during the Napoleonic wars and his instruments scattered. By contrast, both Pigott's and Goodricke's houses still stand in York.) But he communicated his discovery in a letter to Joseph Banks, president of the Royal Society. The letter was delivered by the Count de Bruhl, the Saxon ambassador to Britain (who was also an amateur astronomer), and read on November 13, 1783. It is only half a page, in contrast to Goodricke's impressive nine, and contains none of Palitzsch's intermediate observations, but it gave the period of Algol's variation as two days, twenty hours, and fifty-three minutes, varying by only eight minutes from Goodricke's value. He even suggested a reason for the variation: an obscuration due to a dark companion. In a second letter read two months later, Palitzsch refined his measurement to two days, twenty hours, and between fifty-one and fifty-two minutes. Goodricke later refined his own measurement from two days, twenty hours, forty-five minutes to two days, twenty hours, forty-nine minutes.

Why is Palitzsch's work so neglected? Both William Herschel and his son John knew of and appreciated the observations of Palitzsch, but even today his contribution is largely ignored. The usually accurate *Burnham's Celestial Handbook* lists Palitzsch along with Montanari and Maraldi as one who had observed but not measured the variability of Algol.

I suspect part of the reason is that Goodricke's story is so much more dramatic—the young deaf boy who overcomes his handicaps and contributes a major discovery to science at the age of eighteen, only to come (as we shall see) to a tragic end. This is much more interesting and compelling than the sketchy tale of the older Saxon peasant. Another reason, I think, is snobbery. In the pages of the *Journal of the Royal Society*, the two are introduced as "John Goodricke, Esq." and "Palitch, a Farmer." Herschel himself acknowledged Palitzsch's contribution, but few others took notice of him. Palitzsch made many more observations and became an active correspondent with Herschel, but he discovered no more variable

stars. He died of a stroke on February 21, 1788.

Goodricke's measurement of the period of Algol won him the Geoffrey Copley medal from the Royal Society, given every year for the most significant discovery in science. Two years later, at the age of twenty, he was elected a member of the Royal Society himself.

Goodricke and Pigott continued to look for variable stars. On September 10, 1784, they both logged new variables—Goodricke's being Beta Lyrae and Pigott's, Eta Aquilae. Goodricke was able to discern a complex variation of the intensity in Beta Lyrae, with two minima. Because of its complex variation, Beta Lyrae seemed a perfect candidate for the sunspot hypothesis. Today, however, it is known to be a binary system.

Within a month of finding Beta Lyrae, Goodricke found yet another variable star—Delta Cephei. It was while performing measurements on this new star that Goodricke contracted pneumonia, from which he died on April 20, 1786. He was twenty-one years old. In his short life, Goodricke had discovered three of the major types of variable stars. Algol is the prototype "eclipsing variable" (often called "Algols"), Beta Lyrae stars are called "Beta Lyrae objects," and stars like Delta Cephei are called "Cepheid variables." Since there is a direct relationship between the period of variation of Cepheid variables and their luminosity, they have proven to be extremely valuable in establishing yardsticks for the universe.

Pigott continued to observe variable stars, finding two more—R Coronae Borealis and R Scuti—as well as documenting others that have been shown to be variables since his death. He made many observations of comets before he died in 1821.

Goodricke had, before his death, dropped the sunspot hypothesis as an explanation for the variation of Algol, and the general hypothesis was that it was probably due to a dark companion, despite William Herschel's unease with this solution. In 1787 a young Swiss mathematician, Daniel Huber, demonstrated that sunspots could not be the cause of the observed variation. He analyzed the variation of the brightness over time—what is today called the "light curve" of the star—and deduced what the properties of the two components of Algol must be. Huber later became professor at Basel, but his work was completely forgotten until a German historian of science, Ernst Zimmer, rediscovered it in the 1950s.

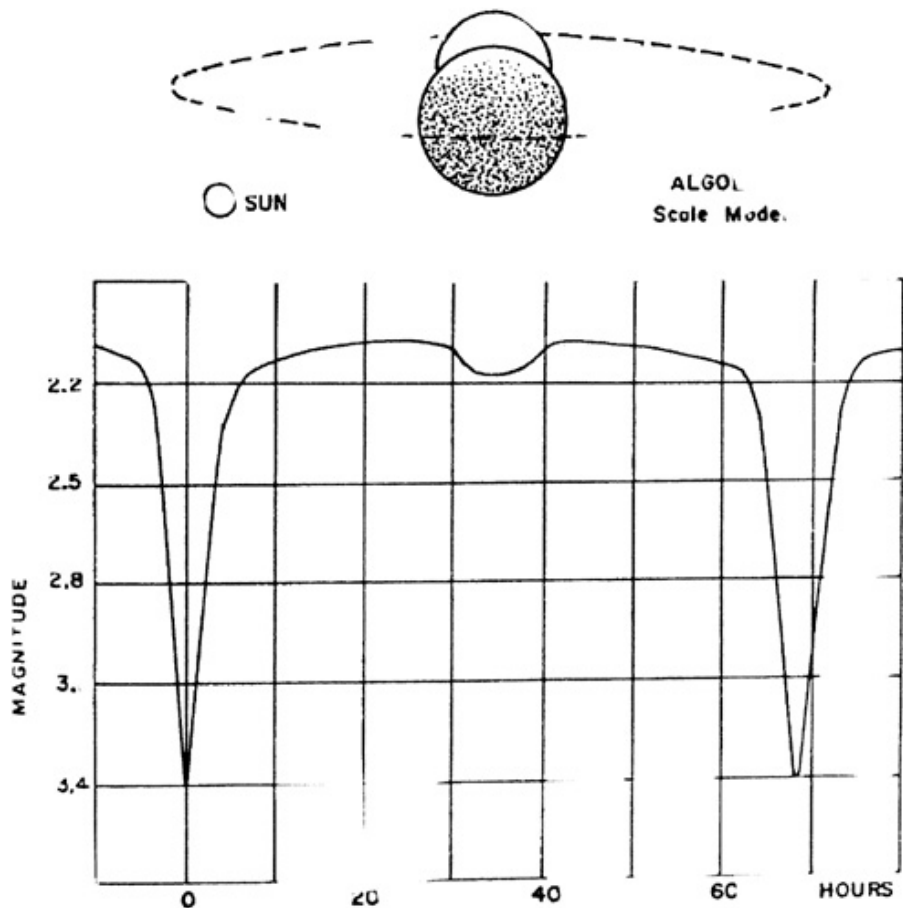
In a Palitzsch-like coincidence, another researcher independently came to the same conclusions as Huber, and at about the same time. William Sewell, an English clergyman, sent his calculations to the Royal Society for publication, but their significance was not recognized, and his papers lay unread at Greenwich Observatory until

they were discovered in 1957 by Olin J. Eggen.

The eclipse hypothesis was finally verified by the spectroscopic work of H. C. Vogel in 1889. The observed Doppler shifting of the spectra as the bright component of Algol first approached, then retreated from the direction of the Earth demonstrated that the radial velocity of Algol varied with the same period as the luminosity variation.

If you look at the light curve of Algol, you can see that its intensity remains very nearly constant for most of its 68.8-hour period. The intensity drops from its normal high of 2.1 to a low of 3.3 in a period of only a couple of hours. It rises in about the same time, with the total period of “diminished light” lasting about $9\frac{1}{2}$ hours. Halfway between minima there is a secondary minimum that is only about $1/20$ as deep as the major minimum. This was not observed until the beginning of the twentieth century, when J. C. Stebbins used a light-sensitive selenium cell to observe the light curve for Algol.

Today it is known that Algol consists of three stars, called Algol A, Algol B, and Algol C. A and B rotate about each other with a period of 2.867 days (the period seen by Goodricke, Pigott, and Palitzsch). The plane of their orbit is almost coincident with our line of sight of them—it is 8° off, so the stars do not completely eclipse each other as seen from the Earth. Algol B, the brighter companion, is a B8-type star, a dwarf. Algol A is a G-type star, a subgiant. Both stars contribute to the light we see, as demonstrated by the fact that the eclipsing of the dim star by the brighter one still causes a dip in the light curve. The presence of the third star, Algol C, was first inferred in 1855 from variations in the normally regular period of Algol’s minima and was first resolved by speckle interferometry in 1974. It lies farther from A and B than those two do from each other. It orbits in the same plane as the other two, but in the opposite direction, with a period of 1.873 years. Algol A weighs 3.6 solar masses, Algol B weighs 0.79 solar masses, and Algol C weighs 1.6 solar masses.

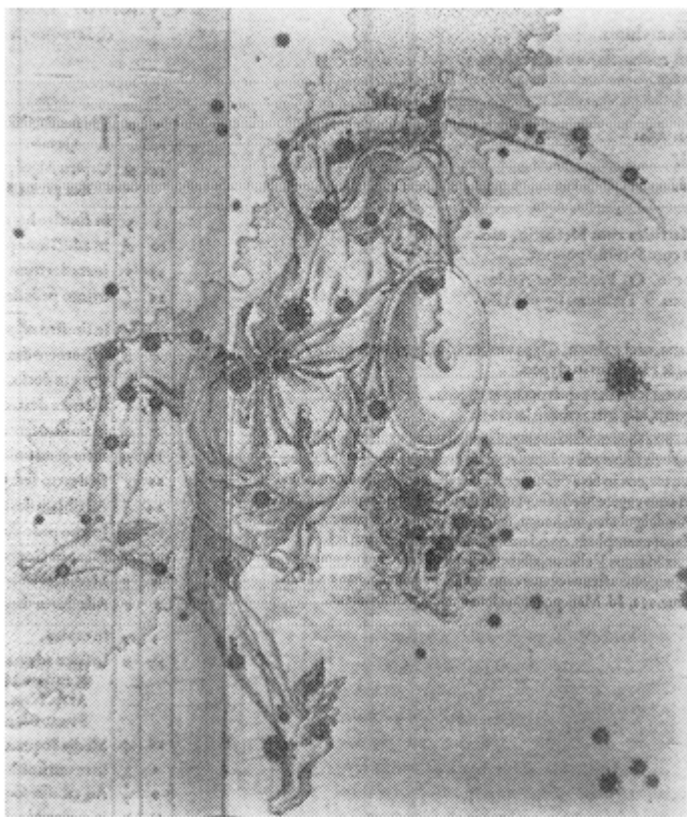


6.2 Light curve of the eclipsing variable star Algol (beta Persei), along with a plan of the Algol system. The apparent intensity of Algol is the sum of the intensities of the two stars, Algol A and Algol B, which cannot be resolved by the eye or by telescopes. There is a sudden, sharp reduction in intensity every 70 hours when the dimmer companion eclipses the brighter. There is also a slight reduction in intensity when the bright companion eclipses the dimmer one, which shows that both stars contribute to the magnitude of the system. The earth is not quite in line with the plane of their orbit, so we never see a total eclipse of either star. The sun is shown to scale. There is a third companion, Algol C, but it is too far away to be shown in this scale. Reprinted from Burnham's *Celestial Handbook* (1978) by Robert Burnham, Jr., by permission of Dover Publications.

WHAT DOES ALL OF THIS have to do with Medusa?

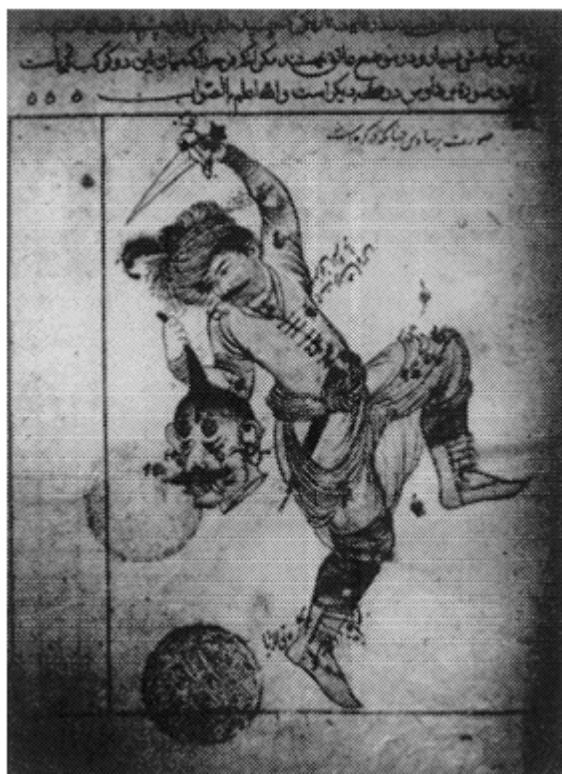
The astronomical observations of ancient peoples have been touted often enough in the popular press. Egyptian priests could use the rising and setting of Sirius to predict the rise of the river Nile.

Eventually they built temples at Karnak and elsewhere that were precisely aligned with the rising of the summer solstice. Stonehenge and the Irish graves at Newgrange were also aligned with important sunrise dates. The Babylonians compiled extensive tables on the planets. The Greek philosophers measured the positions of the planets so well that they knew their orbits could not be circular, and they eventually constructed complex systems of eccentrics and epicycles to account for the observed motions. Measurements of star positions were so accurate that they were able to deduce the precession of the equinoxes, the 24,000-year-long circling of the pointing of the north pole at different regions of the sky. (We are fortunate to be living in an era when our north pole actually points toward the North Star Polaris; this has not been true throughout much of human history.) Is it possible that the ancient astronomers who were capable of making such subtle measurements could miss something as obvious as the blinking on and off of Algol and Mira?



6.3 *The constellation Perseus as it appears in Johannes Bayer's star atlas of 1603, the Uranometria. Photograph courtesy of the Department of Printing and Graphic Arts, The Houghton Library, Harvard University.*

If you look at any star chart, you will find that Algol is represented as one of the eyes of the decapitated head of Medusa, grasped in the left hand of Perseus. His right hand holds aloft his sword, and Perseus is twisted in the sky in an awkward position that at least prevents the hero from looking at the petrifying head of the gorgon. There is no kibisis, but the pictures drawn over the stars usually represent the shield, the flying sandals, and the helmet. Medusa is shown in her snaky-haired glory. The representation is universal, and all Western sky atlases can trace their depictions back to the 1603 *Uranometria* of Johannes Bayer. There is a parallel tradition in the Arab world, where a star atlas was published by the tenth-century Persian astronomer Ramah al-Sufi. Drawings based upon al-Sufi's work depict a very Eastern-looking Perseus holding a monstrous head that isn't really a gorgon's head. It has tusks and generally looks male, sometimes having a moustache and large ears. There are no snakes in its hair, but its hair is long, and Perseus is holding the head by a handful of its generous locks.



6.4 Arab interpretation of the constellation Perseus as it appears in an edition of the star atlas of al-Sufi ('Abd al Rahman Abu al Husain) of 964. Perseus does not look away from the head of the demon, which, in turn, does not look much like a Gorgon. Al-Sufi's source for the star positions,

Ptolemy's Syntaxis, gave technical information but none of the mythology. Photograph of a manuscript in the Cairo National Museum courtesy of Professor Owen Gingerich, Harvard-Smithsonian Center for Astrophysics.

The Persian Perseus of al-Sufi occupies the same position as Bayer's Western counterpart, with the same stars in the same parts of the body. The Persian Perseus, however, twists his body the other way around. He doesn't mind looking at the face of the demon, which seems to indicate that the Muslim world had no parallel tradition of a monster whose head had the ability to turn the observer to stone.

Both Bayer and al-Sufi could align the same stars in the same constellations even though al-Sufi was ignorant of the myth of Perseus because both astrographers drew their inspiration from a common book of astronomy that didn't contain the details of the myths. This was the *Syntaxis* of Claudius Ptolemy of Alexandria, which al-Sufi knew under the title of *Almagest* (*The Great [Book]*). It had been compiled in the second century C.E. and was nearly lost in the burning of the great library at Alexandria. Fortunately, an Arabic copy had been made, and this was perpetuated through recopying.

Ptolemy's book makes dull reading, but it is crammed with information—rather as if we had the equivalent of the Alexandrian telephone book of 150 C.E. Preserved therein are the addresses and magnitudes of most of the prominent stars visible from the Mediterranean. This work gave both Bayer and al-Sufi the cardinal reference points upon which they could base their pictures. A typical entry for Perseus reads (in the Latin translation recovered from the Arabic *Almagest*): “Quae in dextrae manus extremitate et est nebulosa,” meaning, “That (star) which is at the end of the right hand and is nebulous.” Today this star—actually two cloudlike, nebulous clusters of dim stars—is called Chi Persei. Both Bayer and al-Sufi placed a dot at this point, at the coordinates given by Ptolemy. They did this with the twenty-nine stars of Perseus that Ptolemy listed, then simply connected the dots and sketched in the figure of Perseus as best they could. There's not much more in Ptolemy than this bare-bones listing of coordinates, so Bayer and al-Sufi had to supply any further details from their knowledge of mythology or from their imaginations.

Where did Ptolemy get his information? It is generally agreed that one of his sources was an earlier Alexandrian astrographer, Hipparchus, who worked between 161 and 126 B.C.E. Current scholarly opinion is divided on the question of whether Hipparchus himself constructed a star catalog. Those who think he did believe that it formed the basis of Ptolemy's. Bits and pieces of Hipparchus's work survive, but not enough to resolve the issue. Among other things,

however, he refers to the cloudy stars in Perseus's right hand mentioned above.

Hipparchus seems to have been partially stimulated in his work by a desire to refute some of the assertions of two earlier writers, Aratus of Soli (310–245 B.C.E.) and Eudoxus of Cnidos (ca. 408–355 B.C.E.). Eudoxus had tried to put together a star catalog as well, but even less survives of his work than of Hipparchus's. The work of Aratus, however, has survived. It was a bestseller in its day, translated from the original Greek into Latin by Cicero, Germanicus Caesar, and others. Unfortunately, it was a poem, a popular work, and its value in locating the stars is negligible.

In addition, hostile comments about Hipparchus were made by a writer calling himself Eratosthenes and by his followers. This Eratosthenes was not the head of the Academy who had accurately measured the circumference of the earth in the third century B.C.E., but someone who appropriated his name to give some oomph to his own writings. This pseudo-Eratosthenes (as he is usually called) disputed Hipparchus's claim that there were stars in the *harpe* of Perseus.

What all this means is that Ptolemy's star identifications probably go back at least to the time of Hipparchus (the second century B.C.E.), and perhaps as far back as Eudoxus (the fourth to fifth century B.C.E.). We could hardly expect to trace them much further than that, in any case. Accurate records of Greek science (or anything else Greek, for that matter) don't exist much earlier. There is a good chance that these are precisely the identifications of the stars that were originally associated with the constellations. There is some argument about which star is which, but overall the identifications are pretty consistent.

Unfortunately, if the Greeks had definite names for the stars, we don't know what most of them were. Ptolemy's roundabout descriptions suggest that he didn't have names to give them. Today the stars are called by names derived, for the most part, from Arab translations of Ptolemy's long-winded descriptions. These are sometimes not very helpful, as is the case with the stars in the Gorgon's head. Beta Persei (as named by Bayer), the star more commonly called *Algol*, is "*Fulgens quae est in Gorgoneo*" ("The bright one which is in the Gorgon"). There is no mention of its being in the eye, or even in the Gorgon's head, for that matter. Modern translators who call *Algol* the "bright one in the Gorgon's head" are imposing their knowledge of the myth on Ptolemy's words.

So where does the name *Algol* come from? It is a medieval Arabic word, which can be traced no farther back. Most modern English-speaking astronomers base their work, directly or indirectly, on the

1899 book by Richard Hinckley Allen, *Star-Names and Their Meanings*. It is my sad duty to report that Allen, for all his scholarship, is not reliable. It's not that his interpretations, like those of Graves, are fanciful, but that he is too enthusiastic in finding names. The star Algol was, he says "the *Gorgonion* of Chrysococca, *Gorgoneum Caput* of Vitruvius, *Caput Gorgonis* of Hyginus, and the *Gorgonis Ora* of Manilius." None of this is true. If you consult the original texts, you find each of the named authors describing the image of Perseus with the Gorgon's head depicted in the sky, but none identifies any specific star with any body part. Their descriptions are very general, simply saying that in that part of the sky you could find Perseus with the Gorgon's head. It was Allen who hung this blanket description on the particular star Algol. The truth is that, aside from Ptolemy's wordy winded descriptive name, we don't know what the Romans might have called the star. This is a pity, since I would personally love to discover that they called it the Face of the Gorgon or the Head of the Gorgon (which is what all of those names cited by Allen mean).

Since Allen is untrustworthy on the Latin names for the star, I don't believe we can trust him on the Hebrew or Arabic names, either. Frustratingly, Allen did not give his sources, but it appears likely that he derived what he gives as the Arabic name, *Ra's al Ghul*, from the general Arab name for the constellation (which he cites two pages earlier), *Hamil Ra's al Ghul* ("the bearer of the demon's head"). Similarly, I distrust his identification of this name with the Hebrew Lilith.

Once we have dismissed most of the explanations for the various names of the star, Roman, Arabic, and Hebrew, what are we left with? The only name we can confidently say was associated with the star, aside from Ptolemy's clinical description, is simply the Arabic *Algol*, which can be translated as "the demon." Also lurking in that Arab name is the even more direct "ghoul," but that term is misleading. Whereas today we think of a "ghoul" as a sort of animated corpse or corpse-eater, there is no indication that the creature the Arabs meant by that name had any association with the dead. A *Ghul* simply seems to have been an all-purpose demon (so Allen got at least that much right), a supernatural creature that was up to no good. Apparently there is no reliable description of the Ghul or its properties. Having stripped away the extraneous, we are left with the bare, stark fact that the oldest name we have for the star associates it with a monster.

That fact alone has encouraged those who believe that the variability of Algol was known to the ancient world to seize upon it and use it as evidence for their claims. Surely, they reason, the fact that the star was given such an evil name means that those who bestowed it knew there was something unusual about it. This belief, in

turn, has influenced the ways they have translated *Algol*. Richard Hinckley Allen is among the offenders. He suggested “blinking demon,” even though there is nothing at all in the Arab word to suggest “blinking.” Because Allen is so frequently quoted, his enthusiastic overinterpretation has been widely disseminated. Another author suggested “changing spirit,” which, again, has no real basis in the Arabic name. “Ancient people explained this phenomenon [the variation of *Algol*] as the winking of the demon’s eye, still blinking even after the head had been decapitated,” stated Julius D. W. Staal confidently in *The New Patterns in the Sky*, despite the fact that no ancient text actually says anything like this.

This intense desire to prove something from the name alone has caused something of a backlash within the astronomical community, with some writers asserting that the name is simply a coincidence. “Its Arab name ... surely does not derive from early observations of light variations,” says Wulff D. Heintz in *Double Stars*, “but is merely the translation of the ‘Head of the Medusa’ carried in the hand of the Greek constellation figure of Perseus.”

Allen notes that the Chinese knew the star as *Tseih She*, meaning “the piled-up corpses,” and in this case there is plenty of corroborating evidence that this name was applied to the star itself. Again, the evil connotations of the name suggest to many that there is something unusual about the star. “There seems to be a general consensus in its naming,” says Jerome Lettvin, “a consensus which is shared by the astrologers, who consider it the most dangerous star in the heavens: a carrier of misfortune, a mediator of violence.” Lettvin goes on to identify the star with the tradition of the evil eye:

The thesis I mean to advance is that *Algol* and quite possibly *Gorgonea Tertia* [Rho Persei] were the eyes of the Gorgon, of Lilith, of the Lamia, of the creatures whose glance is deadly. These stars became the Evil Eye in the sky particularly by virtue of their blinking; and they were the nucleus around which the constellation of Perseus was erected.⁵

The feature that identifies the star as an eye is the very fact that it “blinks” on and off, like an eye opening and closing. But why is *Algol* never overtly said to be the blinking eye of the Gorgon? Lettvin contends that the reason is, precisely, because of its potentially malign influence. One does not name the evil thing. To do so calls oneself to its attention. Lettvin acknowledges the dangers of proposing a theory that specifically relies on the absence of evidence, but he believes that the power of the virtually universal belief of the evil eye (well attested

by a lengthy book by F. T. Elworthy, a predecessor in the octopus-gorgon theory, as we've seen) provides the sort of extraordinary situation in which such concepts must be considered. He notes that in Greek villages to this day newborns must be protected from starlight for eight to forty days after birth in order to prevent their being "overlooked" by the stars—that is, fascinated by the evil eye.

Lettvin's theory would explain why no one seems to have mentioned the variation of Algol or Mira in the ancient world. Perhaps it could also explain Ptolemy's silence on Algol and even the existence of Mira. But some people are not so sure.

Different scholars have suggested that three ancient societies did know about Algol's variability, and that they said so plainly. In the first half of the twentieth century, much of the technical work on Babylonian inscriptions was carried out by Germans. A German Jesuit father, Franz Xavier Kugler, published two volumes titled *Sternkunde und Sterndienst in Babel (Astronomy and Astrology in Babylon)*, which reproduced, transliterated, and translated the ancient cuneiform texts devoted to matters astronomical and to articles based on this material. Kugler died before finishing the third volume, which was completed by Johann Schaumberger. Schaumberger included a brief essay of his own, "Haben die Babylonier veranderliche Sterne gekannt?" ("Did the Babylonians Know about Variable Stars?"). His evidence consisted of two tablets that refer to the constellations SU.GI (which coincided with the Greek constellation Perseus) and DIL.GAN (which included Cetus). The stars of SU.GI, runs the text, seem at times to get closer together and sometimes farther apart. Schaumberger believed that this referred to the occasional disappearance of Algol, and possibly also of Rho Persei (also variable, within narrower limits) and Eta Aurigae (a variable star much farther away), especially when the constellations were near the horizon, where the dimmed stars could be lost in the haze. In the case of Mira, the tablets said that the stars of DIL.GAN might be dark, yellow, red, or go out completely.

The only comments on Schaumberger's speculations have come from N. T. Bobrovnikoff, another historian of astronomy. He points out that interpreting "growing closer together or farther apart" as an indication that the writer knew about variable stars requires pretty roundabout reasoning, that many unvarying stars would be lost to the haze of the horizon before the variable stars would, and that the references to DIL.GAN refer to the entire constellation, not merely to Mira. Other historical astronomers, such as Otto Neugebauer (who published in Schaumberger's book himself, and who wrote the authoritative *The Exact Sciences in Antiquity*), did not even comment on Schaumberger's theories.

On the issue of Algol, I must agree with Bobrovnikoff—

Schaumberger's explanation seems forced. As far as Mira is concerned, I would point out that our names for these stars have the names for the constellations embedded in them—omicron Ceti, for instance—and some future civilization trying to reconstitute our astronomical knowledge from meager records might think that we, too, were referring to the entire constellation instead of to a single star within it. So it is possible that the tablets referred to by Schaumberger might indeed reflect knowledge of the variability of Mira.

What is most troubling is that there is only a single tablet inscription that can be used as evidence of the knowledge of variability. We know a great deal more about the Babylonians' astronomical knowledge of Venus than we do about this subject. If they were aware of and had studied variable stars, why don't we have more written records of their findings?

The Chinese were known to have been great record keepers on all things, including the stars. "I am not aware of any Chinese observations of variable stars," wrote Bobrovnikoff, "and if there is evidence that the ancient Chinese recognized the existence of variable stars, it should be brought to light." (No pun, presumably, was intended.) Three astronomers have, in fact, suggested that the Chinese left records of the variable stars. Edward H. Schafer, in *Pacing the Void: T'ang Approaches to the Stars*, noted, "For the Chinese, Algol controlled the 'rites and ceremonies of death and mourning,' and when it glared evilly, 'dead men [are piled] like hills.'" He is quoting from the *Chin Shu*, an early record of stellar observations.

Jorge Sahade and Frank Bradshaw Wood suggest, in *Interacting Binary Stars*, that in the *Hsing Ching* (*The "Star Canon,"* compiled between 205 B.C.E. and 25 C.E.) changes in the brightness of the star Tsi-Chi (Algol) were associated with death in the population and with good or bad fortune.

This all appears to be fairly conclusive evidence, until you examine the texts closely. These do indeed refer to things that will happen when certain stars appear or disappear—except that the stars referred to are not variable stars and never have been. Some stars are even described as omens when they appear "curled" or "straight," though no one has ever proposed that these stars can even be discerned by the unaided human eye, or that they had such aberrant shapes. In short, the passages that seem to document observations of Algol as a variable star belong to a long list of examples that speak about nonvariable stars varying their appearance and cannot, therefore, be used as evidence of knowledge of variability. The quote from the *Chin Shu* is consistent with the ominous name given to Algol—"the piled-up corpses"—but provides no further evidence of knowledge of variability beyond that.

Finally, there is India. In 1905 an Indian astronomical historian, Kalinath Mukherji, published *Popular Hindu Astronomy*, in which he claimed that Algol can be identified with the star that is called in Hindi *Mayavati*. He translates the name as “changeful,” noting that this is also the name of the consort of Mara, the Hindu god of love. Mukherji’s statement seems definite enough. Surely the name “changeful” indicates knowledge of variability.

But even Mukherji doesn’t seem entirely sure that *Mayavati* is Algol. More important, his translation of *Mayavati* may not be unbiased. Any student of Buddhism or Hinduism is familiar with the concept of *Maya*, the illusory nature of the temptations of this world. According to Hindu scholars I have consulted, *Mayavati* would more accurately be translated “the illusory one.” This interpretation, too, would be entirely consistent with knowledge of the variability of Algol, but it seems to prove that knowledge far less definitively than “changeful” would.

So what have I shown in this chapter so far? The ancients may have had knowledge of the variability of Algol and Mira, but there is no secure evidence to support this theory. Translations of names for the stars that seem to indicate such knowledge—“changeful spirit,” “blinking demon,” “the changeful”—all appear to be overenthusiastic mistranslations that cannot be supported by an unbiased reading of the relevant texts. All we are left with is the general evil nature of the names of these stars and the possibility that any direct statement about the variability of the stars was suppressed in order to avoid drawing the evil eye.

Yet I believe that the ancient people did know about the variability of Algol and Mira—and of other stars. Why then, have I spent the first part of this chapter shooting myself in the foot? Because I think that the lengths people have gone to in order to stretch the “evil name” hypothesis into a proof is misguided, and that the evidence from Chinese, Indian, and Babylonian texts goes as far as—but no farther than—the “evil name” evidence. The evil eye theory of Lettvin is plausible, and might explain some of our missing references, but as he admits, it is a negative hypothesis, relying on the absence of evidence.

I believe that we can find positive evidence for ancient Greek and Chinese knowledge of variable stars, and that the evidence is buried in mythology. We begin with R. H. Allen’s curious translation of *Algol*—“blinking demon.” Some have rendered this “winking demon,” apparently out of the knowledge that Algol is the rapidly varying star. As I’ve noted, there is nothing to support the word “winking” in that translation. Even if there were, though, it should attract our attention. The Gorgon, most emphatically, does not blink.

The most striking feature in all representations of the Gorgon and its parallels is the Stare—the rigid, fixed, penetrating, unblinking stare. That stare—far more than the later snaky hair, and even more than the grin and the protruding tongue—defines the Gorgon. It is the staring monster, whose evil look can petrify Odysseus or turn the unwary to stone.

The sort of constellation that could inspire such a myth might consist of two preternaturally bright stars close enough together to be imagined as a pair of staring eyes, but not a single blinking, winking star. I repeat, the Gorgon does not blink. There is no suggestion in the myth that the Gorgon opens and shuts its eyes. Until the late Beautiful period, there are no pictures of Gorgons with their eyes closed, even though, in the myth, the Gorgon was asleep when Perseus came upon her and decapitated her. Artists and actors will understand why this is so: if you only have one opportunity to picture someone, you want that picture to display all the most obvious characteristics of your subject. Even if the moment portrayed logically requires you to depict atypical behavior, you should try to avoid doing so. So until late in her artistic history, Medusa kept both her eyes wide open and face forward. There has never been a picture of a Gorgon winking, with one eye open and one eye closed.

I submit that if the star Algol represents the eye of the Gorgon, as Bayer and all his followers claim, and if the star influenced the myth, then the myth would have developed in a very different form. The Gorgon would have been a blinking monster, perhaps a one-eyed monster like the Cyclops, and the blinking eye would have petrified when it was open. But the myth did not take this form.

The star Algol, I hold, represents something else entirely: not the eye of the Gorgon, but her entire head. Allen's assertion is correct, I believe, although the evidence he cites from Vitruvius, Manilius, and other Roman authors does not support it. So why *do* I believe that Algol is the Gorgon's head? Because every third day you can see Perseus cutting it off. It disappears as he stuffs it into the kibisis. This also explains why there are three Gorgon sisters, but only one of them is mortal. The two immortal sisters (Stheno and Euryale) represent the two days during which Algol remains a bright, second-magnitude star. The third day belongs to the mortal sister, Medusa, because on that day the brightness of the star dies. There might even be a connection here with the helmet of invisibility, since the star becomes invisible.

There is more. Recall that I pointed out how the Gorgons and the Graiae were doublets. Both were sets of triplet sisters born of the same parents, and both were nemeses of Perseus. I suggested that the Graiae were holdovers from a parallel version of the myth in which they were the major threat Perseus had to overcome. That parallel version, I

hold, can also be explained in terms of the stars. In this case Algol is an eye. It is the eye that is held in common by the three Graiae and is passed back and forth from one to another. Every third day, when it passes by Perseus, he steals it, and the light goes out (recall how the ode of Pindar says he “darkened the Phorcidess”). Algol lies at the end of the arm of Perseus. He is always depicted carrying the head of Medusa with this arm, but he could as well be using it to decapitate Medusa or to steal the eye of the Graiae.

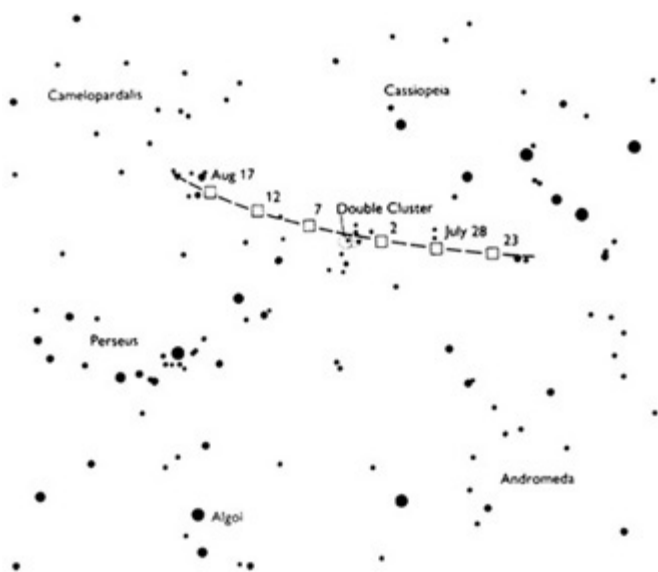
What about Perseus’s other arm—in particular, the peculiarity with his right hand? As I’ve noted above, this hand is represented by two nebulous and dim clusters. If you were to look at the stars in the sky in this area, you probably would not be tempted to draw an arm in there. So why is the arm of Perseus in such an unlikely place?

Around the beginning of August every year, the brightest meteor shower of the year occurs in the constellation of Perseus. It is called, appropriately, the Perseid meteor shower. This is the best time of year to see meteors, and, being late summer/early fall, it is usually a comfortable time to be outdoors as well. If you set up a chair and look in the direction of Perseus, you can be assured of seeing several meteors per hour—up to about thirty to forty per hour at the peak—some of them quite impressive. The “shooting stars” rain down like a shower of gold.⁶

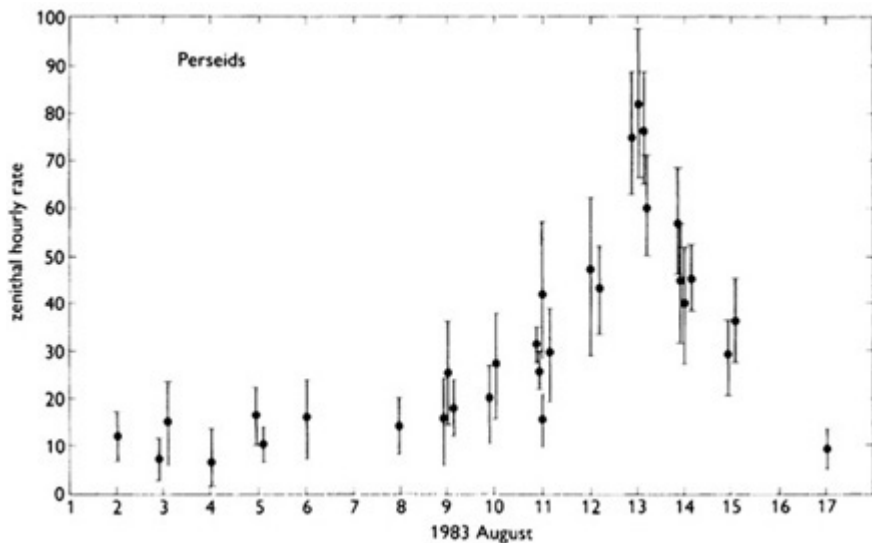
The *radiant* of the meteor shower—the point in the sky from which the meteors appear to be coming—is not merely in the vicinity of Perseus; it is, precisely, at the end of his right arm. The radiant actually moves through the sky over the course of time. When the shower is near its peak, the radiant exactly coincides with the double cluster. This cannot be coincidence. Perseus’s arm is there because shooting stars seem to come from there. And what is he doing? He is hurling into Lake Tritonis the eye and tooth of the Graiae.

I can actually carry this somewhat further. It has always struck me as bizarre that Perseus’s arm was represented by such a dim set of stars. All our evidence—even going back to fragments of Hipparchus, indicates that the Greeks held that his arm was up there, at the source of the Perseids. But let’s say you are an ancient Greek, making up the constellations. You don’t have Bayer’s or al-Sufi’s drawings superimposed on the chart of the stars to tell you which is which. You don’t have the star tables of Claudius Ptolemy to guide you. All you have are a bunch of stars forming a pattern on the sky. You can try this yourself—go out into the open at night and look up into the sky where Perseus is (there are plenty of guidebooks to help you find it). If, as they always say at the planetariums, you are in an urban area (where most of the U.S. population lives), you won’t be able to see all the stars. That’s just as well. If you *could* see all the stars you would be

receiving too much information, and it would be hard to pick out the patterns. Look up in such an urban setting and you can easily pick out the reversed question-mark-plus-triangle that make up Leo the Lion, or the J-plus-T that make up Scorpio the Scorpion, and it should immediately be obvious why those star-shapes have been identified with those animals. You can see the mouth and mane of Leo in that reversed question mark, see the curled tail of the scorpion with its stinger in the tail of the J. And it certainly helps to only have the brightest stars visible.



6.5 *Motion of the Radiant of the Perseid meteorite shower with time. The radiant is the position in the sky from which the meteorites appear to be coming. This position is not the same from night to night. Note that the radiant passes directly through the Double Cluster, the dim and nebulous collection of stars that are designated as the hand of Perseus in Ptolemy's catalog. Drawing reproduced from Meteors (1993) by Neil Bone, by permission of Sky Publishing Corporation.*



6.6 Frequency of meteorite observations during a Perseid meteorite shower. The Perseid shower is the most spectacular of the meteorite showers, and the frequency of meteorites peak in early August, when the constellation Perseus is most prominent in the early evening sky. The frequency is greatest within a week or two of the radiant passing through the Double Cluster. Drawing reproduced from *Meteors* (1993) by Neil Bone, by permission of Sky Publishing Corporation.

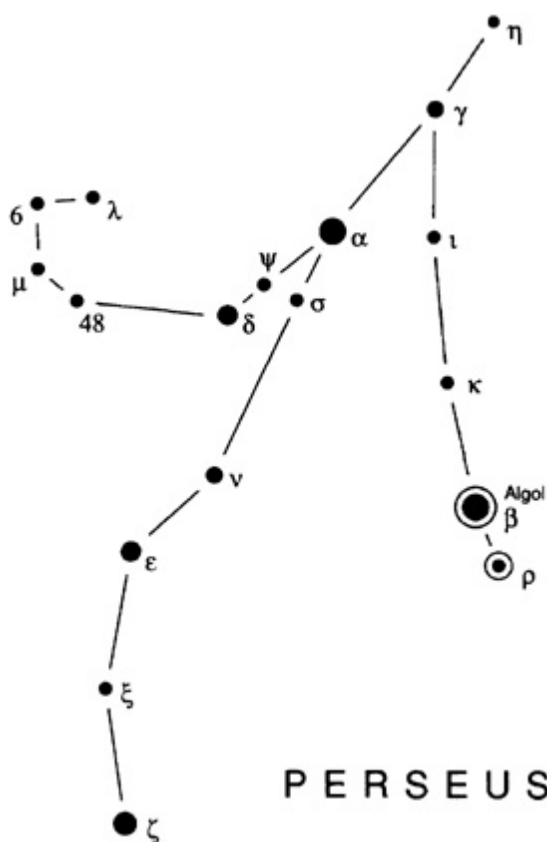
So look out in the sky, or draw out the stars from a star chart, being sure to retain only the brightest stars—those of fourth magnitude or higher. You'll find that you have a very crude stick figure. The body of Perseus is roughly a straight line. Coming off to the side by Algol is a curving line, obviously his right hand. From Ptolemy's time onward (at least), this hand has been shown carrying the Medusa's head, but in my interpretation it is reaching out to cut off the head or to steal the eye of the Graiae.⁷

And on the other side—well, Ptolemy and his followers all call that Perseus's thigh. But this line is exactly the same size and height as the one that makes up his right arm, and it's placed far too high to be a thigh. To the unprejudiced eye, it *has* to be Perseus's left arm. And it ends in a tight little curve of stars—Mu Persei and Lambda Persei and Perseus 48. Perseus's other arm thus ends in his curved sword.

This is the reason Perseus is depicted with a curved *harpe*—not because it evokes the memory of the moon goddess or because it is the Eastern weapon of Marduk or because it is the peasant weapon of a peasant hero. Perseus originally carried a curved sword because his constellation is quite obviously carrying a curved sword. It was only

later, when the recurring nature of the Perseid meteorites came to be known and incorporated into the myth in various ways, that the arm was moved much higher up. Hipparchus and pseudo-Eratosthenes could then argue about whether there were any actual stars in the arm of Perseus. Even though it was inappropriate, the thigh had to be pulled up to take over the office of those stars that were originally the left arm of Perseus.

Finally, my claim that Algol represents all the Gorgons and all the Graiae can be validated in an unusual way. The three Graiae and the three Gorgons were all the daughters of the same parents—Phorkys, the Old Man of the Sea, and Ketos, the sea monster. Ketos in Latin is *Cetus*, which is also represented by a constellation, the central star of which, Omicron Ceti, is better known as Mira. The first two variable stars to have been discovered historically were Algol and Mira. Both are relatively bright stars that are easily seen by the naked eye and whose variations are also easily seen by the naked eye. If it were not a deliberate act, then it is surely a truly fantastic coincidence that the constellation containing the first variable star to be discovered represents the mother of the figure or figures represented by the second variable star to be discovered.



6.7 The Constellation of Perseus. This drawing indicates the stars that are fourth magnitude or brighter. These are the stars that can be seen from a modern suburban setting on a clear night. I suggest that the figure of Perseus was originally defined by the stick-figure seen here. One arm held the head of Medusa (or the eye of the Graiae), the star Algol. The other hand held a curved sword, the harpe, clearly seen as an arc of stars. I maintain that when the Double Cluster was defined as the Hand of Perseus (so that Perseus could be seen as hurling the Eye into Lake Tritonis in the form of the Perseid meteorites) the “arm” had to be re-interpreted as the Thigh of Perseus. Thereafter al-Sufi and Bayer Algol were always drawn as the eye of Medusa. Illustration by Hillary Mitchell.

I have just begun. There are a great many more curious circumstances to bolster my interpretation. The next chapter is devoted to these.

THE SURROUNDING SKY

I have wondered, reflecting that the story of Perseus and Andromeda is not known to Greek literature before Herodotus 7.150, whether the hero's association with the heroine may not even have been created to explain their contiguity in the skies.

—G. P. Goold,
in the introduction to his translation
of the *Astronomica* of Manilius

THE *Astronomica* IS ONE OF THE poetical works R. H. Allen referred to as a source for a name for Algol—the *Gorgonis Ora* I mentioned in the last chapter.¹ In Book 1, line 359, of this first-century poem, Manilius simply says that Perseus held up the face of the Gorgon to kill the Sea Monster (Cetus, although Manilius doesn't name her). R. H. Allen notwithstanding, Manilius does not, in fact, try to identify any star or cluster of stars with the Gorgon's face.

The citation in Goold's introduction is from the only surviving work of Herodotus, *The Histories*, in which the first historian tells a story current in his time about a messenger sent from Xerxes to the men of Argos. This messenger supposedly bore word that the Argives and the Persians ought not to fight with each other, because the Persians were the descendants of Perses, the son of Perseus and Andromeda. The story makes no mention of the fabulous fight with the sea monster, and Herodotus soberly reports it as a true history.

It's not likely, however, that any part of this story is true. The Persians certainly didn't believe themselves to be the descendants of the Greeks. The very name *Xerxes* is a Greek attempt to force the Persian name *Kshayarsha* into something a little less foreign-sounding. The supposed derivation of *Persians* from *Perses* is an attempt to forge an eponymy on a par with the biblical derivation of *Ammonites* from an ancestor named *Ben Ammi*. The Persians must have been as responsive to this explanation of their name as Native Americans are to being called *Indians*.

Nevertheless, the story illustrates that in Herodotus's day the story of Perseus and Andromeda was at least partially believed. Herodotus wrote around 446 B.C.E., so his account, brief as it is, is the earliest one

we have of Perseus and Andromeda. Recall that this part of the story is missing from the existing fragments of Pherekydes. (The story of the rescue of Andromeda from the sea monster existed then, as well: recall the Corinthian black-figure amphora from the previous century.)

At about the same time that Herodotus wrote his *Histories*, Sophocles composed his play *Andromeda* and Euripides his own trilogy based on the myth. These two playwrights held that Perseus, Andromeda, Cepheus, and Cassiopeia were set among the stars by the gods. The plays themselves have been lost, but we know from the works of pseudo-Eratosthenes that the characters portrayed in them were supposed to have been translated to the sky, where they became the constellations. Thus we know that by the fifth century B.C.E. the Greeks definitely did associate the constellations with characters from the myth of Perseus and the Gorgon.

The constellations of Perseus, Cepheus, Cassiopeia, and Andromeda are all located very close together in the sky, along with Pegasus. The constellation of Cetus is also relatively nearby, separated from the others by the zodiac. The constellations span the sky from near the pole almost to the celestial equator, and all are visible early in the evening in the late summer and early fall. This is the same time that the Perseid meteor showers are at their height, so it was perhaps inevitable that the spectacle of the meteors should be well known and would be associated with the myth.

Goold suggests that the story of Perseus and Andromeda might not have evolved simply to explain their constellations' being next to each other in the sky. I believe that he is right, but that he does not go far enough. I believe that the properties of the constellations dictated the form of the myth and determined which constellations were to be associated with each other.

Constellations are the products of physical forces, probability, and human imagination. The laws of physics govern the creation of stars, which fall into spatial relations with one another according to the rules of probability. Stars may have an average density in space, but that doesn't mean that they are evenly distributed. Throw a handful of pennies into the air and observe the way they fall. They won't form an even spread on your floor. Instead, they will clump together in some places, with bare spaces in between. A. D. Moore, professor of electrical engineering at the University of Michigan, liked to demonstrate this behavior using a bottle filled with little green and red balls, which he shook up. Instead of settling into an even pattern of red among green, the balls would form little islands of red in a sea of green, and vice versa. In a few places the colors were distributed in about even numbers. Moore called it his "nonpareil mosaic." When he showed it to his students, many of them thought there was something

behind that clumping, some electrostatic force that drew all the balls of one color together in a region. But it was only the inexorable law of statistics, which dictated that clumps must occur as well as regions of equal dispersal.

So it is with stars. In places they seem to be evenly scattered across the sky, but inevitably there are places where they bunch close together, forming apparent patterns. Here human imagination takes over, resolving those clumps into meaningful shapes, which we call the constellations.

There is a second layer to this idea of clumping. Some groups contain special stars, like our variables Algol and Mira. One might naively think that these should be evenly scattered across the sky. But the same rules of probability decree that we will have clusters of constellations that all contain the same kinds of special stars. In such cases, I maintain, the constellations themselves are linked together by the human imagination and spun into myths.

I have already mentioned that Algol and Mira are both in constellations associated with the same myth. Algol is, I suggest, the head of the Gorgon and the eye of the Graiae, while Mira appears in the constellation of Cetus, the mother of both the Gorgons and the Graiae. The preceding chapter noted many other associations. For one thing, Cetus (Ketos) is also the name of the sea monster from whom Perseus rescues Andromeda. Cetus thus has two entirely different associations with the myth of Perseus—first as mother of the Graiae and the Gorgons, then as a monster that Perseus himself kills.

Referring to the year-long variation of Mira, Julius D. W. Staal writes that “ancient people believed this pulsating action to represent the beating heart of the monster Cetus.” Plausible as this statement may be, Staal is entirely out of bounds in making it. No ancient text says this, or anything like it. It would be wonderful if one did, as that would constitute proof of ancient knowledge of variability. Yet Staal’s assertion is very attractive. Mira is in just the right position to be the heart of the sea monster. It is red like blood, and its regular oscillation in brightness echoes the pumping of a heart. The likely association of this striking, very visible variable star with the equally striking and visible variable star Algol through three different lines of myth—Cetus as mother of the Gorgons, Cetus as mother of the Graiae, and Cetus as the monster defeated by Perseus—seems to me highly probable. Note that, to associate the constellations of Perseus and Cetus, the ancient people would have had to “cross over” Taurus and Aries, neither of which appears in the myth at all. That suggests a deep compulsion to draw Cetus into the fold, because all the other constellations associated with the myth of Perseus are contiguous.

We're not yet finished. Recall the last major variable star discovered by the deaf astronomer John Goodricke: delta Cephei, which gave its name to the class of Cepheid variables. The possessive *Cephei* means that this star is in the constellation of Cepheus, the father of Andromeda. Goodricke used a telescope to observe the star, but the variation is easily visible to the naked eye. It ranges between magnitudes of 3.6 and 4.3, with a period of 5 days, 8 hours, and 48 minutes.

And what about the queen, Cassiopeia? There she sits on her throne, looking like a giant “W” The most obvious star in the constellation is gamma Cassiopeia, in the very center of the “W,” occupying a prominent place in an obvious pattern. It is certainly a phenomenal coincidence that this most conspicuous star is a variable star as well—a fact that wasn't known to modern science until after 1910. Up to that point, astronomers thought gamma Cassiopeia had a constant magnitude of about 2.25.² Then the brightness began to increase, continuing until 1937, when it began to decrease. It leveled off in 1938 at about 2.5, where it remained for two years before declining further to a magnitude of 3. Then, once more, it rose slowly, to 2.5 by 1954. For obvious reasons, Gamma Cassiopeia is called an irregular variable star. Nobody knows why it behaves as it does. The variations, though, are quite large ones for a star that is already very bright. The only reason they are not more obvious is their lack of periodicity and the long period of time over which the changes occur. But if you were looking for this star, you would notice it easily enough without a telescope.

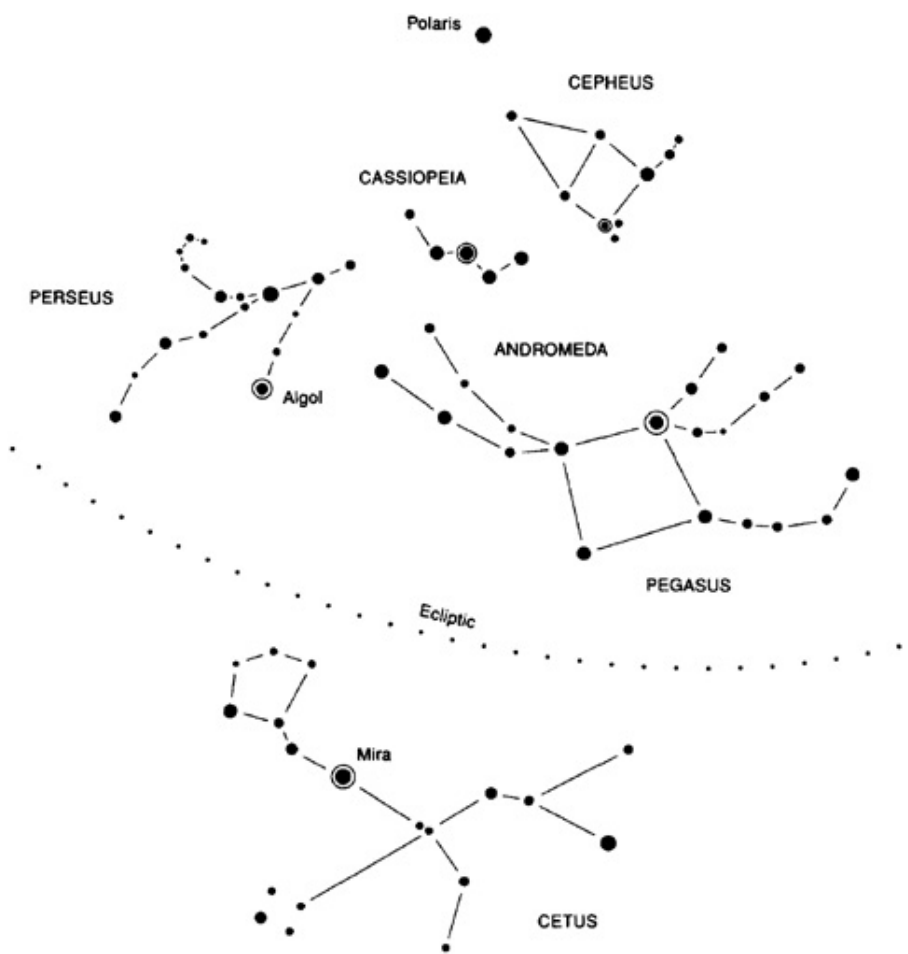
Rho Persei, situated not far from Algol, is also a variable star. Its period is also irregular, and its brightness ranges in magnitude from 3.2 to 4.1. Lettvin thinks it is the other eye of the Gorgon, but I have to wonder if it might be the tooth of the Graiae, taking Algol to be the eye.

There are no variable stars in the constellation Andromeda that can be seen with the naked eye. But there are thirteen naked-eye variable stars in the sky visible from the latitude of Greece. Six of them appear in constellations associated with the myth of Perseus. The only apparent bonds among these constellations are their location in the same area of the sky and the fact that they all contain variable stars. All, with the exception of Cetus, are in contiguous constellations, but the spectacular nature of Mira would encourage anyone to give it a little slack and pull it in with the others, even though it's a little farther away. Other naked-eye variable stars are in constellations too far away to be considered part of the pack—Eta Aquilae, Chi Cygni, and Betelgeuse (in Orion) are just too distant. Lambda Tauri is close enough, but its variation is only half a

magnitude—0.5—and this may have kept it out of the club.

To reiterate, by chance a group of constellations that are close together—Perseus, Cepheus, Cassiopeia, Pegasus, and Cetus—all have variable stars that can be seen by the naked eye. Two of these are spectacularly visible and were the first to be discovered historically. In addition, the spectacular Perseid meteor shower (whose peak in activity occurs when the constellation is most prominent in the evening sky) draws even more attention to this region. Under the circumstances, it would not be at all surprising that an ancient civilization would link these constellations together in a common myth. I have no direct proof that this was the case, but I offer up the fact that the constellations do have this common bond as evidence that the ancient Greeks were aware of that bond. Their association of Perseus, Cetus (in multiple senses), Cepheus, Cassiopeia, and Pegasus in a common myth suggests they knew that the constellations named for these characters all contained naked-eye variable stars.

I can make an even stronger case. If we assume that the two variable stars in Perseus are associated with his nemeses and not with Perseus himself, and if we except Pegasus, then all the constellations containing variable stars represent antagonists of Perseus. Perseus fought the Gorgons and the Graiae. He defeated Ketos/Cetus, the sea monster. Cepheus and Cassiopeia turned against Perseus, siding with Phineus. That, too, seems an odd coincidence. I maintain that it was a deliberate addition, one that fits in well with the idea that the variable star was somehow malevolent, perhaps associated with the evil eye. Note that Andromeda, who did not turn against Perseus, also does not contain a variable star. Again, I have no direct proof of this theory, but I would argue that it is highly improbable all these circumstances occurred purely by chance.



7.1 The Perseid Constellations. Only the brightest stars are indicated, and constellations not associated with the myth of Perseus (such as Aries, the Ram), are omitted. The size of the dot indicating each star indicates the magnitude (brightness) of the star. Variable stars whose variation is observable by the naked eye are indicated by circled dots. Illustration by Hillary Mitchell.

There are some very interesting parallels to the myth of Perseus and the sea monster. Earlier I devoted an entire chapter to the artistic parallels; here I refer to parallel myths—stories in which another hero seems to walk the same path as Perseus.

One such hero is Hercules. Interestingly enough, Hercules was the grandson of Perseus. This is why it seems odd that Ovid has Perseus turn the giant Atlas, who supports the sky, into the mountain Atlas by showing him the Gorgon's head. Hercules is supposed to have briefly taken Atlas's place during the course of one of his Twelve Labors.

(According to the story, Hercules convinced Atlas to fetch the Golden Apples of the Hesperides by agreeing to hold up the sky for Atlas in the meantime. Atlas performed the task but, having found someone else stupid enough to have taken on the task, was unwilling to resume his burden again. Hercules agreed to continue supporting the sky, but he asked Atlas to take it back for just a moment while he got a pad to cushion his shoulders. Atlas agreed—thus proving himself even stupider—and Hercules ran off with the apples.) This he could not have done if Atlas had already been petrified into mountain form. But as I've pointed out, Ovid never let consistency get in the way of a good story.

One of the less well-known myths of Hercules involved Hesione, the princess of Troy, daughter of King Laomedon. Poseidon and Apollo agreed to build the walls of Troy in exchange for all the cattle born in the kingdom that year. After they were finished, however, Laomedon refused to pay their price. In retaliation Poseidon sent a sea monster named Ketos against the city. Laomedon learned from the oracle of Zeus Ammon that Troy would be spared if the princess Hesione were chained to a rock as a sacrifice to Ketos.

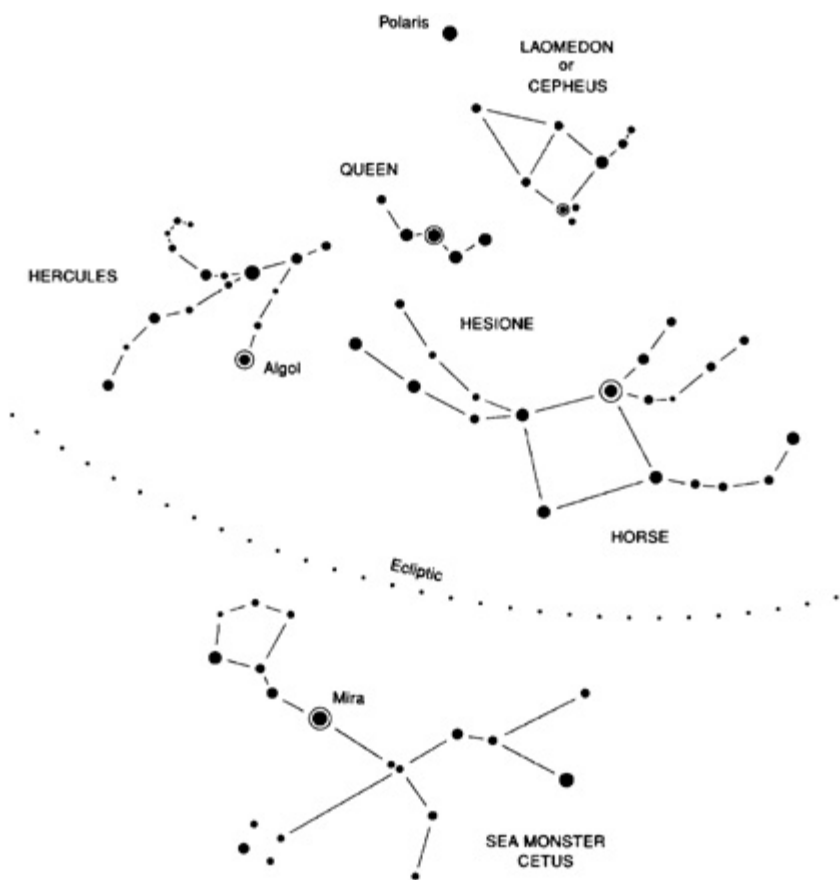
Hercules came upon the naked, chained princess much as Perseus had discovered the naked, jeweled, chained Andromeda. Like Perseus, he went to the king and offered to save the princess from Ketos in return for a gift—in Hercules's case, the magical horses Laomedon had received from Zeus. Hercules received help from the goddess Athena and freed Hesione, then leaped into the mouth of Ketos, killing the monster from within and emerging three days later from the belly of the beast. But Laomedon reneged on this deal, too, as he had with the gods and as Cepheus had with Perseus. And so, like Perseus, Hercules waged war against the king. This major war against Troy took place a generation before the more famous Trojan War.

These parallels are astonishingly close, but if we consider another myth of Hercules the similarities become truly awesome. According to Apollodorus, when Hercules was fighting the Lacedaemonians he begged the king of a nearby city for help. The king wavered, worrying about the security of his own Tegea if he took his army and left the city undefended. But again Athena came to Hercules's aid. She gave him a bronze jar containing the hair of the Gorgon (!). Hercules gave this jar to Sterope, the daughter of the king, and told her that if she held up the jar in front of a hostile army—provided she did not look before her—the army would be put to flight. This is eerily similar to the way Perseus defeated his enemies in Seriphos and, according to some, in Ethiopia—by holding up part of the Gorgon to the enemy's sight while averting his own gaze.

And the name of the king? Cepheus!

To this I add that Hercules is one of the few heroes besides Perseus to use the curved *harpe* sword. He used it to defeat the Lernean hydra. It would not be unusual to depict him holding the sickle-sword. In fact, one of the few illustrations we have of this legend, an Attic black-figure cup from Taranto, shows Hercules grasping the tongue of Ketos with one hand and slashing with a *harpe* held in his other hand.

The similarities between the story of Perseus and Andromeda and that of Hercules and Hesione are so very close and so obvious that many mythologists have insisted they must come from a common root. Robert Graves thought this a misinterpretation of his imagined artwork, of course. Others see the myth of the defeat of the sea monster as derived from the Mesopotamian myth of Tiamat and Marduk; they imagine that the story of the fight with the monster ultimately evolved into the myth of St. George and the dragon. I am, of course, skeptical of such theories and think that the common root is the series of constellations. I can identify the figure of Perseus and his *harpe* with that of Hercules and his *harpe*. Cepheus is Laomedon (and maybe Cepheus again), Andromeda is Hesione, Ketos is Ketos, and Pegasus is the magical horse of Zeus that Hercules demanded as a prize. The red heart of Cetus represents the slaying of Ketos from within. Perhaps the three-day period that Hercules spent in the monster's belly is associated with the three-day period of Algol's variation.



7.2 The Perseid Constellations interpreted as the characters in the myth of Hercules and Hesione. Mythologists have long believed that this myth and that of Perseus and Andromeda were inspired by the same original, possibly the same art work. Note that the sea monster is called Keto in both myths, and that the king is arguably Kepheos (Cepheus) in both versions as well. Illustration by Hillary Mitchell.

Pegasus appears in the myth of Perseus when the winged horse springs from the neck of Medusa. In this same myth, the tyrant Polydektes wants horses brought to his party as wedding gifts. Hercules wants horses as the price of saving Hesione. There seems to have been a concerted effort to bring horses into the myths that can be associated with the constellations in this part of the sky. Perhaps this is because the horse was already there. Pegasus apparently is one of the constellations that the Greeks carried over from the older Babylonian tradition. When the myths of Perseus and, I believe, of Hercules and Hesione grew up around the variable-star constellations, it was necessary to incorporate the horse into the story somehow,

even if the coupling was somewhat forced. Perhaps this is the explanation for the horse-bodied Hippogorgon on the Boeotian vase in the Louvre and for the few Hippogorgon gems. It seems a much more direct connection than the association of Medusa as the consort of Poseidon, who was sometime portrayed as a horse.

Mention of Pegasus brings to mind the other great myth in which the horse Pegasus plays so great a part—the story of Bellerophon. This is another very old myth. Parts of it appear in Homer, and references to it abound in the Odes of Pindar and elsewhere. Like the myth of Perseus, it is recounted in its entirety by Apollodorus.

Bellerophon was the grandson of Sisyphus (he of the rock), a resident of Corinth. It was said that he killed someone named Bellerus, whence his name (*Bellerophontes* = “killer of Bellerus”), but that explanation seems forced and is not universal. It could be that Graves is correct in deriving the name instead from *Belephoron*, meaning “dart thrower,” the appropriateness of which will soon be evident.

Whether he killed Bellerus or not, Bellerophon was responsible for the death of his brother, Deliades. He was forced to flee his native Corinth and take refuge at the court of King Proetus of Tiryns (the uncle of Perseus, you will recall). There Queen Stheneboea fell in love with him and made advances toward him. Bellerophon refused her, and in retaliation Stheneboea accused him of trying to rape her (just as the wife of Potiphar accused Joseph of doing in the Book of Genesis). Proetus naturally believed his wife, but he could not act against someone whom he had taken under his protection.

In order to punish Bellerophon, then, Proetus sent him to the court of Lycia, where Iobates, father of Stheneboea, ruled. He gave Bellerophon a sealed letter to be presented to Iobates. Upon reading the letter, Iobates decided to get rid of Bellerophon by giving him an impossible task, as Polydektes had with Perseus. He sent him to kill the Chimera.

The Chimera was, like Cerberus and the multiheaded Hydra, the offspring of Echidna and Typhon; as Iobates explained, the king of Caria had made it his own pet. The Chimera had the head of a lion, the body of a goat, and the tail of a serpent. Representations usually show it with a goat's head in the middle of its body (the name *Chimera* means “she-goat”), a serpent's head formed out of the tail, and a body more like a lion's than a goat's. According to legend, it had fiery breath and was thus very dangerous to approach.

Bellerophon realized that he had a serious problem, and he went to the seer Polyeidus, who advised him to catch and tame the flying horse Pegasus. This he did with the aid of Athena, who gave Bellerophon a magic golden bridle. Pictures of the battle between

Bellerophon and the Chimera have been popular since the seventh century, with good reason. It is a spectacular scene. Flying on the winged steed as Perseus flew on his sandals, Bellerophon came upon the monster from above and peppered it with arrows. Finally he shoved a lump of lead down its throat. The Chimera's breath melted the lead, which poured down its throat and killed the beast.

After this Iobates again tried to kill Bellerophon by sending him against the pirates of Caria, but Bellerophon defeated the pirates as well. Convinced now that Bellerophon had the aid of the gods—and therefore might be innocent—Iobates revealed the contents of the letter to Bellerophon and asked for his side of the story. He then begged Bellerophon's forgiveness and gave him his daughter Philonoe in marriage.

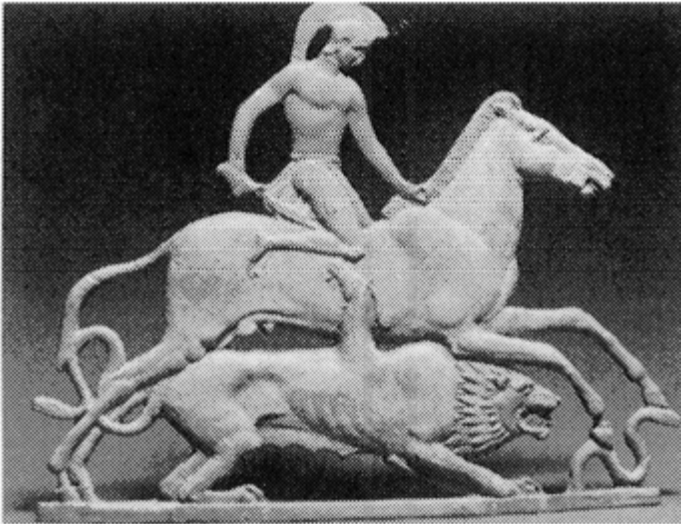
Nevertheless, Bellerophon came to a bad end. On Pegasus's back, he tried to fly to Olympus, something a mortal was not allowed to do. Zeus sent a gadfly to sting Pegasus, and Bellerophon was thrown to earth, where he fell onto a thorn bush. For the rest of his life he wandered the earth, lame, blind, and alone. Pegasus became the bearer of Zeus's lightning bolts.

The parallels with the Perseus myth are less exact here than they are in the story of Hercules and Hesione, but they are still striking. The hero is sent to do battle with a seemingly invincible monster by a king who hopes the encounter will result in the hero's death. The hero receives magical gifts from Athena that enable him to fly and to overcome the monster. At the end, the hero defeats the monster, fights a band of men, and wins the princess in marriage.

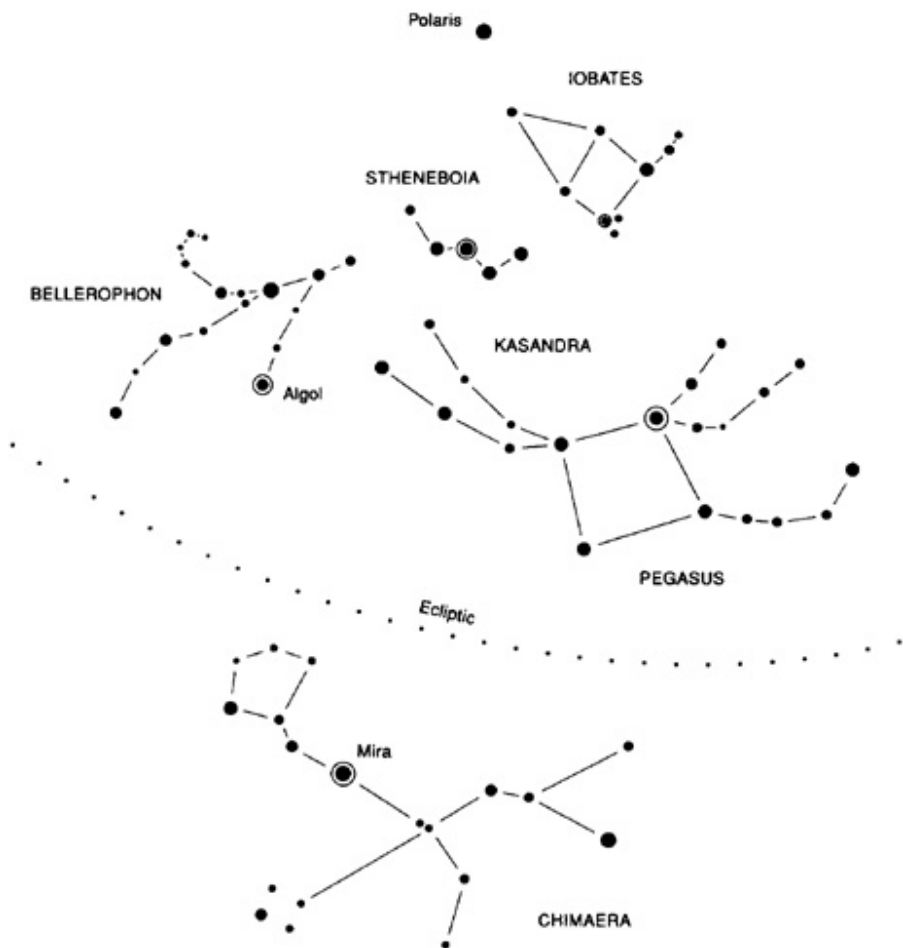
It's not hard to picture these figures as the constellations—substituting Bellerophon for Perseus, Sthenoboea for Cassiopeia, Iobates or Proetus for Cepheus, Philonoe for Andromeda, and, of course, the Chimera for Cetus. The Perseid meteorite shower, emanating from the hand of the figure of Bellerophon, could represent the darts that he throws at the Chimera (and that give him his name). The glowing red star Mira represents the chunk of lead that has been shoved into the mouth of the Chimera. For about half the year, when Mira is dim, the lead is still solid. But then it begins to melt, and the molten block of lead turns red, killing the Chimera. The constellation of Aries lies between Perseus and Cetus, and this may have something to do with the naming of the Chimera and the goat's head that the monster bears in its middle. Finally, the fall of Bellerophon to earth might also have been inspired by the Perseid meteor shower.

Curiously, there's no place in this scheme for Algol. If my scenario is correct, one would expect Algol to show up somewhere. Perhaps it is the stinging gadfly that stings Pegasus.

How can all three myths be represented by the same constellations? There already is a constellation of Hercules elsewhere in the sky. How can I propose that the constellation of Perseus might also be viewed as Hercules?



7.3 *Bellerophon attacking the Chimaera. A terra-cotta relief once used as a decoration on a chest or other object. Mid-fourth century B.C.E. © The British Museum.*



7.4 *The Perseid Constellations interpreted as characters in the myth of Bellerophon and the Chimaera. Bellerophon attacked the Chimaera by throwing darts (his name may mean “dart thrower”), which may be the Perseids. He killed the Chimaera by shoving a lump of lead into its throat, which its fiery breath turned red and melted, killing it. I suggest this is the brightening of the star Mira. Illustration by Hillary Mitchell.*

All three heroes are Argive heroes and are related in different ways. But each is associated primarily with a different major city. Perseus is from Argos and ultimately becomes king of that city. Only later does he change places and become king of Tiryns. Hercules is associated with Tiryns from the beginning (naturally enough, as a descendant of Perseus, who had ruled the city), while Bellerophon is from Corinth. This suggests that what we have here is the same story with slight modifications to match the city where it was originally told. In Corinth the tale was of Bellerophon, and the stars were seen to

represent him. In Tiryns it was Hercules who was seen in the stars, and in Argos it was Perseus. Each story was too good to stay at home, however, and in time each spread abroad and developed a distinct identity, despite the close similarity among them. Storytellers like Apollodorus and those he drew upon would be tempted to stress the differences rather than the similarities, the better to differentiate the stories.

There is one more myth of Pegasus, and I believe that the constellations can throw some light upon this one as well. The warrior with the golden sword, Chrysaor, and the flying horse, Pegasus, were both children of Medusa. They were said to have sprung from her neck after Perseus decapitated her. Artists who tried to depict the moment, however, inevitably produced a very bizarre and unsatisfying representation.

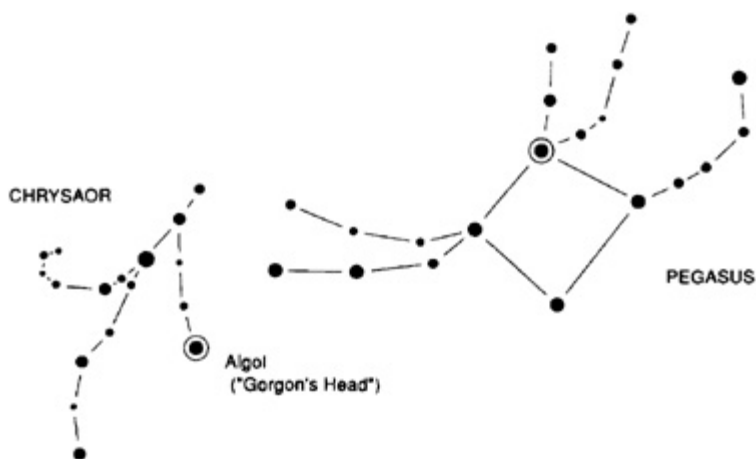


7.5 (top), 7.6 (bottom) *Perseus escapes with the head of Medusa in his*

kibisis, sheltered by Athena's cloak. Pegasus and Chrysaor are born from the neck of Medusa, and one of the other Gorgons threatens Perseus. Drawing from an illustration on a red-figure amphora, now in Munich. Drawing reproduced from Arthur B. Cook's Zeus: A Study in Ancient Religion by permission of Cambridge University Press.

Why should the two have been born from her neck? Theories that they were somehow the result of the Gorgon's fecund blood aren't really much help. Serpents were said to have bred from the blood of the Gorgon's neck that fell upon the sands of Libya. If just the blood was responsible, why couldn't Chrysaor and Pegasus be born the same way?

But what if the artists have always misinterpreted the meaning of "born from the Gorgon's neck?" Invariably, they show the pair erupting from the stump of the neck attached to the body, or lying near the dying carcass of Medusa. According to the *Argonautica* of Apollonius of Rhodes (and other sources), the Libyan serpents were born from drops of Medusan blood that fell into the desert sands as Perseus flew homeward with his trophy. This blood dripped from the parat of the neck that was still attached to the head. Why shouldn't Chrysaor and Pegasus also have been born from the head of Medusa, rather than from her body?



7.7 The Perseid Constellations interpreted as the Myth of the Birth of Pegasus and Chrysaor. I suggest that both are born not from the stump that is attached to the body, but from the part of the neck still attached to the head. As in our earlier figures, Algol is the head of Medusa. The figure of a warrior with the curved sword springs away to one side—Chrysaor—while the flying horse—Pegasus—springs away to the other side. Illustration by Hillary Mitchell.

Try visualizing the constellations once again. Ignore every thing but the constellations of Perseus and Pegasus. The variable star Algol represents the head of the Gorgon. To the east lies the body of a warrior with a curved sword in his hand. To the west lies Pegasus. The identifications of the stars given by Ptolemy indicate that both are facing away from the Gorgon's head. It thus appears that both the warrior with the sword and the flying horse are springing from the head of Medusa.

This, I think, must be a very early interpretation of the constellation, independent of the myth of Perseus. It became enshrined in the canon of Greek myth at an early period and was recorded by Hesiod in his *Theogeny*. When Apollodorus found this scrap, he worked it into the myth of Perseus as best he could, just as he retained the myth of the Gorgon in Hades from *The Odyssey* and worked it into Hercules's visit to the underworld. Vase painters and cameo cutters also tried to work this bit of Hesiod into the story of Perseus, with mixed success.

I said earlier that the Chinese term for Algol—*Tse Chie*, meaning “the heaped-up corpses”—could be explained in terms of the behavior of the stars as well. To begin with, we have to look at the star patterns that the Chinese saw. These are very different from the ones seen by the Greeks. Surprisingly, the term “constellations” is applied only to those Western patterns first fully reported by Ptolemy and to the ones added to star charts since the Renaissance. The patterns recognized by other cultures are called “asterisms.” The upper body of Perseus and his thigh (what I called the hand holding the *harpe*) forms “the celestial boat”, *T'ien-Tchouen*, for the Chinese. Lambda Persei is *Tsi-Choui* (“the swollen waters”), the line of stars adjacent to Algol is *Ta-Ling* (“the great trench”), and Algol is *Tsi Chi* (“the heaped-up corpses”).

As Julius D. W. Staal noted, the asterisms in this area of the sky—which was most visible in the early evening in August and September—are named after objects or events prominent at that time of year. This was the time of the great floods, when a river might overflow its banks—thus, the swollen waters. Dams might burst and dikes be washed away, and so boats were made ready at this season. It was also the season for mass executions, when criminals from the previous year were killed and the corpses piled up (Algol). They were then cast into a wide pit (the great trench) for a common burial, a dishonorable fate.

I propose that the evil-sounding phrase “the heaped-up corpses” means simply that the corpses referred to were, every third day, cast into the great trench. Like Medusa's head, which was thrust into the kibisis out of sight, the corpses are cast into the trench, where they,

too, disappear. Like the eye of the Graiae, they are picked up, and perhaps in the August-September Perseid meteor shower we actually see them being tossed down. A grim story, perhaps, but a vivid star-show.

We are often told that the stars in the night sky were the poor man's theater of the ancient world, that lacking other diversions, the common people as well as the priests watched the skies. At a time when most of the population was illiterate, when the bright illumination provided by candles was costly, when the diversions of prayer and gambling and sex and conversation were played out, the stars were still there. Even a weary laborer must on occasion have looked up at the skies and tried to make sense out of the passing show, endlessly repeated year after year. I can easily imagine a storyteller making use of this vast natural visual display, timing his stories so that, in the course of an evening's telling, the bright star that was the Gorgon's head or the eye of the Graiae had dimmed by the time he called attention to it again. There it goes now, streaking into Lake Tritonis! Or perhaps his Chinese counterpart was gleefully pointing out how the bodies of the criminals of heaven had disappeared from the place where they had been piled up, and were now streaking down toward the trench that awaited them.

Such knowledge indicates long observation. The period of Algol is actually about three hours and fifteen minutes short of being three full days, so every third day it winks out a little earlier in the night. After at most three observable disappearances separated by three daytime periods, the next obscuration will be invisible, since it will occur during the daytime. It took Goodricke, Pigott, and Palitzsch weeks to observe and verify the actual period, and they knew what they were looking for. The eleven-month cycle of Mira obviously requires a year to observe, and the periodicity would not be obvious until several such cycles had been completed. The variation of Gamma Cassiopeia is measured in decades. Such careful observation over extended periods of time is certainly possible, especially for people with fewer distractions after dark than we have today, and who have a vested interest in the sky as a practical calendar.³

Let me recap what I have suggested in the last two chapters:

- The ancient people knew of the naked-eye variable stars Algol, Mira, Delta Cephei, Gamma Cassiopeia, and perhaps Rho Persei. Because of this, they associate all the constellations containing these into a single myth, even though they have to “cross” the constellation of Aries in order to bring Cetus into the myth. The constellations containing variable stars are almost all antagonists of the central

figure.

- In Argos, the hero is Perseus, in Tiryns it is Hercules; both bear curved-blade *harpe* swords, as the constellation originally had. In Corinth, the hero is Bellerophon. In later times the sword arm of Perseus was moved from the curved swathe of the *harpe* to the nebulous double cluster in order to take advantage of the Perseid meteorite shower, which thus seems to emanate from his hand.
- The variation of Algol every third day is seen as Perseus cutting off the head of Medusa and placing it in his kibisis. An alternative version has him intercepting the eye of the Graiae. The Perseid meteorite shower, which occurs when the constellation is most visible, represents Perseus hurling the eye into Lake Tritonis.
- The Gorgons are three in number, two immortal and one mortal, because of the three-day period of Algol's variation. The two immortal Gorgons are the two days during which Algol remains bright. The third, mortal sister represents the third day, on which the star winks out. Similarly, there are three Graiae because the eye remains bright as it is passed from the first to the second and from the second to the third on the first two days. When it passes from the third back to the first on the third day, Perseus is there to intercept it.
- Further evidence of the knowledge of variable stars comes from the fact that both sets of triplet monster sisters (represented by Algol) are the daughters of Cetus/Ketos, whose nearby constellation also has a very noticeable variable star in it.
- The red variable star Mira probably does represent the beating heart of Ketos, whom both Hercules and Perseus kill. They are usually represented doing so with their swords, and perhaps the blood-red color of Mira also represents the bleeding of their victims. Perhaps this is why Perseus does not use the Gorgon's head to petrify Ketos. The earliest picture we have of him with Ketos shows that he has the kibisis, but not until very late does he use it against the sea monster. In the myth of Bellerophon, the reddening of Mira represents the molten lump of lead that is forced down the chimera's throat, killing the beast.
- The horse, Pegasus, was already in that part of the sky, as a constellation designated by the Babylonians. It had to be worked into the story somehow. So Perseus has to provide a gift of horses, and so there is evidence in both ancient art and literature that the artists were trying to put Perseus aboard Pegasus. As it is, the myth of the birth of Pegasus from Medusa's neck serves to link the two. Hercules demands a gift of horses for rescuing Hesione, and Bellerophon rides Pegasus,

- The odd birth of Chrysaor and Pegasus from the neck of Medusa is explicable in terms of the constellations. Chrysaor, the warrior with the golden sword, is represented by the figure usually taken as Perseus, with his prominent curved sword, leaping to the east of Algol. Pegasus, the winged horse, leaps away to the west from Algol, which represents the head of Medusa.

If my suppositions are correct, the constellations and variable stars explain much about the myths of Perseus and Medusa, as well as Andromeda, Hesione, and Bellerophon and the Chimera. But still this theory does not explain everything. I do not believe, though, that it has to. As I have said, myths are the product of many inputs, and they continue to evolve through time. In particular, nothing in the stars explains the odd appearance of the Gorgon itself. (In fact, since I claim that Algol could stand in for the Graiae as well as Medusa, I could hardly claim that the stars did dictate the form of the Gorgon.) So where did the Gorgon's appearance originate?

Before I answer that question, I want to address two others; Why does the face of the Gorgon appear on shields? And why does it appear on antefixes? I believe these questions are essential to understanding why the figure of the Gorgon is so widespread, and why it is so powerful. There is nothing capricious about these appearances—they were deliberately chosen for a good purpose. The fact that parallels to the Gorgon filled the same offices elsewhere in the world proves that point, and in searching for the answer to why so many people used it in precisely the same way, I believe we will be led to the ultimate explanation of the Gorgon.

THE FACE ON THE SHIELD

His first job was a shield, a broad one, thick, well-fashioned everywhere. A shining rim he gave it, triple-ply, and hung from this a silver shoulder strap. Five welded layers composed the body of the shield. The maker used all his art adorning this expanse. He pictured on it earth, heaven, and sea, unwearied sun, moon waxing, all the stars that heaven bears for garland: Plêiadês, Hyadês, Orîôn in his might, the Great Bear, too, that some have called the Wain, pivoting there, attentive to Orîôn, and unbathed ever in the Ocean stream.

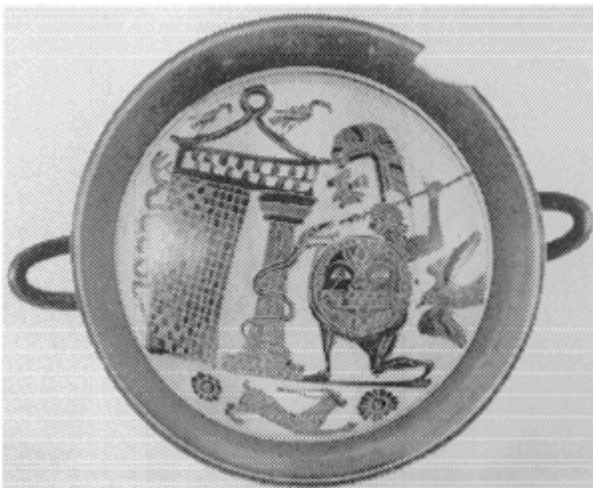
—*The Iliad*,
Book 18, lines 483–489

THUS DOES HOMER DESCRIBE THE NEW shield that Hephaestus makes for Achilles, to replace the one that was lost when Achilles let his protégé Patroclus bear his arms and armor against the Trojans. After killing the young warrior, Hector stripped him and took Achilles's armor for himself. The new shield is described in great and loving detail. It provides justification for bringing up other stories as asides, and it recalls the long-gone days when each piece of armament was a lovingly wrought work of art. The fragment called "The Shield of Hercules" was undoubtedly written in imitation of this passage from *The Iliad*, in which the lines quoted above are only the introduction to a much longer description.¹

The story of Perseus abounds in shields. First, there is the shield of Perseus, which he uses to view the head of Medusa as a reflection rather than looking at her directly. Then there is the aegis of Athena, which has been pictured both as shield and breastplate. The story says that Perseus gave the goddess the head of Medusa to place upon her aegis, and paintings and statues show Athena with Gorgon heads on both shield and breastplate—often at the same time.



8.1 Archaic Corinthian hydria (water vessel) depicting the Nereids mourning the death of Achilles. His shield, its surface completely filled with the Gorgoneion, the face of the Gorgon, lies at the base of his bed. The shield with the Gorgoneion is usually the attribute of either Athena or of Achilles, but not invariably so. Courtesy of the Musée du Louvre, Paris.
 Photograph by M. and P. Chuzeville.



8.2 Archaic cup from Laconia depicting Achilles lying in wait for Troilus. He is identified by his Gorgon shield (there are other interpretations of this scene, I note, in which the warrior is not Achilles). Courtesy of the Musée



8.3 Achilles battling Memnon. A red-figure Attic Kalyx Krater, dating from 490 to 480 B.C.E. The Gorgoneion on Achilles' shield is less prominent here.
Courtesy Museum of Fine Arts, Boston, Catharine Page Perkins Fund.

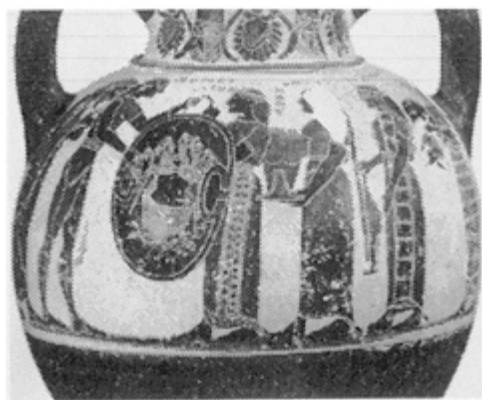


8.4 Hephaestus making the armor for Achilles as Thetis looks on. This

drawing is from an Attic red-figure vase from Nola. Courtesy of the Museum of Fine Arts, Boston, Francis Bartlett Fund.



8.5 *The birth of Athena from the forehead of Zeus, who is recognizable because of his thunderbolt. Athena emerges fully armored. Ares stands to the right, holding a shield with a Gorgoneion filling it. This is interesting because Athena is just being born and therefore cannot be responsible for the Gorgon head being on the shield, regardless of whether it gets there by Perseus's actions or her own. Perhaps this is another example of events telescoped in time appearing on a single figure, as with the images of Medusa holding Pegasus and Chrysaor we saw in [Chapter 3](#) (even though she has not been decapitated yet). The Gorgon shield, so associated with Athena, might be thought important enough to be present at her birth, despite the problems it presented for commonsense chronology. Photograph Courtesy of the Museum of Fine Arts, Boston, Henry Lillie Pierce Fund.*



8.6 *Achilles receiving arms from the Nereids, including a shield with an atypical Gorgoneion. A black-figure Attic vase. Courtesy of the Museum of Fine Arts, Boston, J. A. Rodocanachi. See also figure 8.20.*

Recall also that the brothers Acrisius and Proetus, the grandfather and granduncle of Perseus, fought each other for the kingdom of Argos, and it was in the course of their bitter struggle that the shield was invented, according to Apollodorus. Other sources, however, report that Abas, the father of Acrisius and Proetus, was a warrior of such renown that he could frighten his enemies merely by displaying his shield, indicating that such a thing already existed.

Regardless, the family of Perseus seems to have been associated with shields. Was this perhaps because of Perseus's role in placing the face of the Gorgon on one? If so, perhaps the fact of the face's getting on the shield was more important than how it got there. There is a tradition, reported in Euripides's play *Ion*, that Athena herself slew the Gorgon (who is not there identified as one of three sisters, nor is she associated with any of the rest of the Perseus myth) and placed its head on her shield. (This may have influenced our myth-novelist friend, Dionysius Skytobrachion, who said that she slew a giant named Pallas and made a cloak of his skin, accounting for her being called Pallas Athena.) Yet another tradition holds that Zeus himself slew a creature to make the aegis.

These other traditions give different explanations for how the head of the Gorgon came to grace the shield and/or the aegis of Athena. I submit that there are actually two such traditions contained within the myth of Perseus as we have it from Apollodorus. One explanation is the obvious one—that Perseus gave the head to Athena, who then placed it on her shield. The other is indebted to the late tradition that Perseus avoided the petrifying glance of Medusa by looking at her reflection in the mirror of his shield. Why use the shield instead of some other mirror? Why would looking in the shield preserve him from being turned into stone? I suspect that the real reason may be that when Perseus looked at the head of Medusa in the shield and struck off her head, its reflection was trapped in the shield—trapped as surely as the shadow of Peter Pan was by Wendy Darling.

Regardless of whether my theory is true, clearly the bare fact of the Gorgon's head on the shield had to be accounted for, as the several different myths of Kirtimukha in India tried to explain that evil head over the doorway. The existence of the head on the shield in Greece is every bit as real as the head over the doorway in India. Few shields from Bronze Age Greece have survived, but we have many representations of them on vases and in sculpture. Some of these are meant to depict the shield of Athena (or her aegis) or that of Achilles, but many more are not. The red-figure vases of Greece abound in pictures of shields filled with the staring, grimacing, tongue-protruding Gorgon face.

The painted shields look very two-dimensional, as if the faces had

been simply painted over the originals. By contrast, when the figure is carved in stone the Gorgon face appears to be carved on the shield itself. We have plenty of examples of such. So, in the ancient world, were the faces of the Gorgons painted on the shields or carved or beaten into them? The answer is, probably both, depending on the nature of the shield itself. Some were made of wood or of hide, while others were of bronze, often backed by other materials. A plain hide or wooden shield would be more likely to feature painted decoration, a metal one would more likely have the face in relief.



8.7 *Shield with mask of the Jaguar God. Detail of Stela I, El Caribe. Post-Classical Maya. Compare with Greek shields bearing Gorgoneia. Photograph reproduced from Cecelia F. Klein's The Faces of the Earth (1976) by permission of Garland Publications.*



8.8 A shield decorated with a very Gorgon-like face. Compare with figure 8.9. This wooden shield was made by the Iatmul of the Sepik River region of Papua New Guinea in the nineteenth and twentieth century. It is typical of their shields. Note the face with exceptionally large eyes, broad nose, wide mouth, and protruding tongue. Photograph courtesy of the Metropolitan Museum of Art, the Michael C. Rockefeller Memorial Collection, gift of Nelson A. Rockefeller, 1969.



8.9 A terra-cotta relief from a tomb depicting Achilles with a shield. The entire front of the shield is taken up with a Gorgoneion of the archaic type, also done in relief. Achilles is identified not only by the shield, but by his name in the upper right. To the left can barely be made out the Amazon Ainaï, also labeled. This terra-cotta is said to come from Kerameikos, Athens. Photograph courtesy of the Metropolitan Museum of Art, Samuel D. Lee Fund, 1942.

But why is the face there at all? As I've pointed out, the staring face appears not only on Greek shields, but also on shields from the Sepik River region of New Guinea. Similar Gorgon-faced shields were found among the Mayans, who also had faces on their breastplates, aegis-style. Shields from Jaina Island look eerily like the Greek shields, their circular portion being completely filled with a gritted-toothed, staring, protruding-tongued face. I don't mean here to suggest any sort of diffusion—the appearances of the Gorgonlike shields are far too widely separated in space and in time. But I believe that the similarity of appearance indicates a similarity of intent—Greeks, Mayans, and Sepik River people all put those faces on their shields for the same reason. This begs the question—what was that reason?

The staring face with its scowl and protruding tongue pretty obviously suggest a taunt to most people. It's one of the most obvious

and natural ways of “making a face.” For many people, that explanation would be more than sufficient. Who hasn’t seen a fighter taunting his opponent with words or gestures, hoping that the other will make a rash move? This could indeed be the reason for the faces on the shields, but I suspect the real reason lies somewhat deeper. If taunting were the object, then why aren’t there also obscene shield devices? Why not erect phalluses or hands with the middle finger extended? Why not the lesser gesture of the hand fingering the nose?

Could it be that the face on the shield is there simply as an apotropaic device, intended to frighten away evil influences? If the Gorgon face placed over an oven was supposed to ward off evil spirits, why not put it on a shield to ward off evil blows or the demons of bad luck? Again, this may have been the intent of some who put the Gorgon on their shields. And again, I think the real reason is more complex. If warding off evil were the intent, we would expect to find other apotropaic devices on shields, perhaps the “horned hand”—a hand with the index and smallest finger extended, while the others are curled together in the ancient sign to ward off evil.

To understand why the Gorgon’s face was placed on shields, we must take a detour, much like our trip through the stars. In this case we visit the realm of psychology. Around the year 1900 C.E., such researchers as Landolt and Helmholtz were examining the way the human eye scanned objects. (Hans Heinrich Landolt was a physical chemist whose research into refractive index carried him into optics and vision research. Hermann von Helmholtz was an extraordinary individual whose program of research was very broad. He is probably best known today for his work in acoustics and electrodynamic theory, but he was a major figure in physiological optics, inventing the ophthalmoscope and compiling the seminal *Handbook of Physiological Optics*.)

One might think that the eye simply sweeps across objects within its view, taking in all the details at a glance. It turns out, however, that things are a great deal more complex than that. In 1891 Landolt investigated the behavior of the eye during such sweeping motions by having volunteers move their glances through a thirty-degree arc of vision. He placed a magnesium lamp in the center of the arc, providing a concentrated bright source. This light left an afterimage similar to the one produced by a photographic flash. It functioned as a sort of living photograph that the subjects could still see and examine for several seconds after completing the sweeping motion. Lo and behold, the shape traced out by this afterimage was not a simple and uniform curve—rather, it was interrupted by “knots” of light. Landolt concluded that the eye did not make clean sweeps of its visual field, but instead made short hops, remaining stationary between the hops.

This phenomenon, called *saccadic motion*, became the subject of intense study.

At first the study of eye motion was restricted to clever experiments in which the subject was as much of an experimenter as the designer. Flashing light sources were used to time the motion of the eye, and the observer simply counted the number of afterimages that could be observed across a sweep. Later studies attempted to dissociate the subject from the experiment by having the experimenter himself observe the eye as it moved.

In 1901 Raymond Dodge and Thomas Cline of Wesleyan University put the scientific study of eye motions on a quantitative basis by photographing the motion of the eye. From that time on, investigators strove for greater resolution and accuracy in plotting the motion of a person's gaze.

Some of these experiments are painful even to read about. Both researchers and subjects must have been solidly dedicated to the search for truth. In 1914 J. Ohm recorded motions by attaching a lever to the subject's eyelid and conjunctiva. Others affixed contact lens-like "cups" over the eye, coupling the motion out with a lever or using a tiny attached mirror to reflect a beam of light that traced the motion. Yet another method involved attaching a flake of white medium or a tiny mirror to the cornea and photographically following its motion. The subject's eye was anaesthetized with cocaine derivatives in these studies, but still the experience could not have been pleasant. Despite all the pain and effort, the resolution obtained by these methods was not very good.

A better approach was to photographically record the reflection of a light source from the cornea of the eye; this method didn't require that anything be attached to the eye itself and was relatively unobtrusive. In 1973 T. N. Cornsweet and H. D. Crane of Acuity Systems and Stanford University introduced the Double Purkinje Image method of tracking, in which the virtual images created by reflection from the cornea and the one formed by reflection from the rear surface of the cornea are used to very accurately locate the eye's position.

Various other methods have since been added to the arsenal: reflections from other parts of the eye, measurement of electrical potentials, observation of the retina. One interesting system uses external magnets to measure the position of fine wire loops embedded in scleral contact lenses. Today it is very easy to measure the position of the gaze to within $\frac{1}{2}$ degree, and with the more advanced methods one can do far better.²

The earliest studies were concerned simply with how the eyes

move and how gaze shifts. Later studies tried to track eye motion during reading. But the most interesting results were those from researchers investigating how the eye moved to take in aspects of a picture. G. T. Buswell did some early studies of this in the 1930s, using the relatively crude equipment available then. By the 1960s more refined apparatus allowed for much better measurements. Probably the most widely cited work is that of Alfred L. Yarbus of the Institute for Problems of Information Transmission at the Academy of Sciences in Moscow. His book *Eye Movements and Vision* (1967) features traces of eye movements by various subjects studying several scenes. These traces are most interesting when they are viewed side-by-side with the original scene or, better still, are superimposed on the scene.

One figure shows the face of a girl from the Volga region, along with the tracings of three minutes' worth of free gazing by a test subject. The result is something that looks like a crude sketch of a face. One rough, light trace indicates the outline of the head, showing that the subject scanned the face. But the bulk of the viewer's time was spent studying the mouth, nose, and especially the eyes. The eyes are by far the darkest portion of the trace, showing that the gaze returned to the eyes again and again. A dark and heavy bar between the eyes shows that the subject's gaze shifted back and forth frequently between the right and left eyes. The next darkest trace is around the mouth, and the two eyes and the mouth are joined by an equilateral triangle of gaze tracks, showing that the viewer's gaze was concentrated on that small portion of the face.

Yarbus himself notes this:

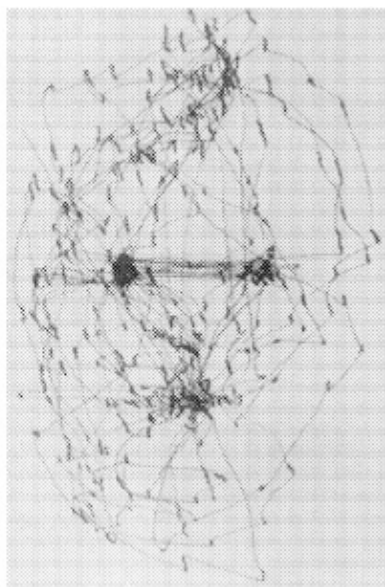
In the movements of the eye we have no analogy with the movements of the hand of a blind person, tracing the outlines and contours. ... The human eyes and lips (and the eyes and mouth of an animal) are the most mobile and expressive elements of the face. ... It is therefore absolutely natural and understandable that the eyes and lips attract the attention more than any other part of the human face.³

Regardless of the reason, it is abundantly clear from Yarbus's photographs that the gaze is magnetically drawn to these two features of the face. In another figure, showing a one-minute gaze at the face of a girl, the tracing sketches the edges of the face but is concentrated for the greatest amount of time on the two eyes. In a third, a subject spends two minutes gazing at the bust of Nefertiti in profile; the gaze outlines the figure but lingers longest at the eyes and ear.

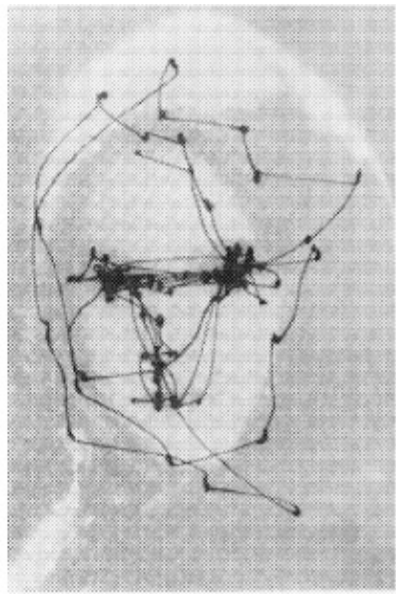
Even nonhuman faces, Yarbus notes, attract the gaze in the same

way. The picture of a two-minute examination of a drawing of a lion's head reveals that the muzzle is traced and the ear explored, but again the darkest points, showing the areas examined most closely, are the eyes. A study of a gaze at the statue of a gorilla similarly indicates the strong attention paid to the eyes.

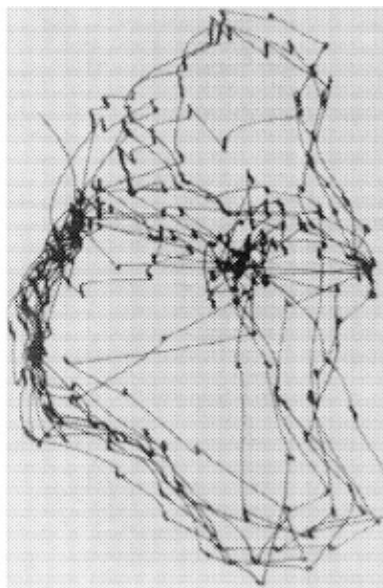
More important, I think, are the photographs showing the gaze of subjects looking at the picture *The Unexpected Visitor*. This picture, a reproduction of a painting by I. E. Repin, shows a man who has just been allowed into a chamber. A woman, who had been sitting, rises to meet him. Even when observers were given this painting to look at without any prior explanation or instruction, their gaze was strongly drawn to the faces of the people in it. Darker by far than any other areas in the picture are the faces, with dark bars joining them where the viewers' gazes shifted back and forth from face to face, occasionally flitting down the bodies of the people but always returning to the heads.



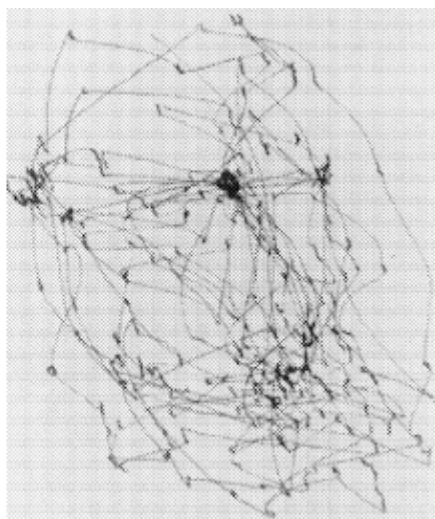
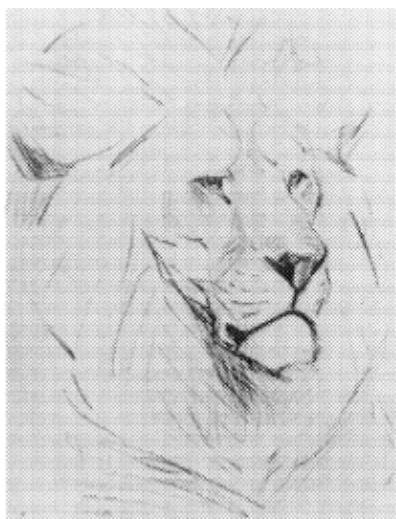
8.10 (left), 8.11 (right) Photograph of a girl “of the Volga,” along with the trace of the movement of the gaze over a three-minute period. The gaze returns frequently to the eyes, and slightly less frequently to the mouth, both key features on the Gorgoneion. Photograph from *Eye Movements and Vision* by Alfred L. Yarbus. Reprinted by permission of Plenum Press.



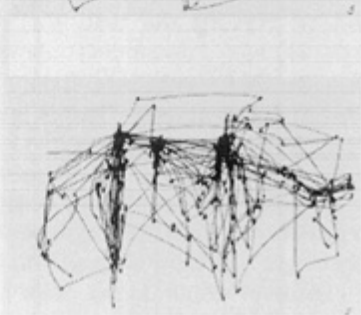
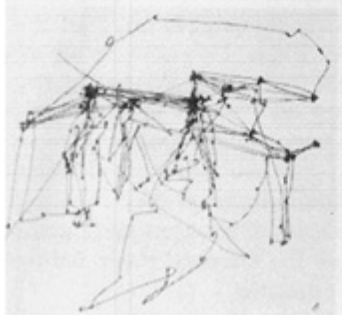
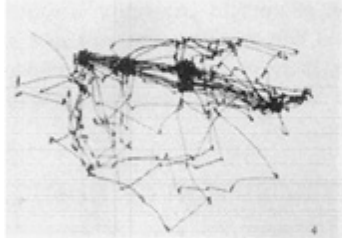
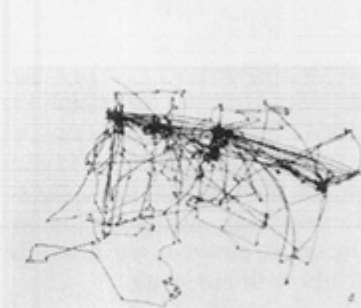
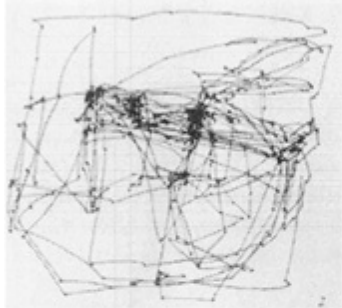
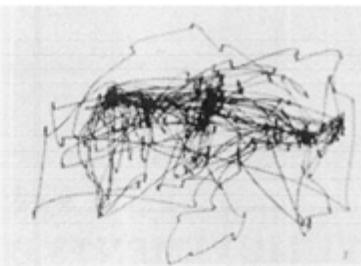
8.12 (left), 8.13 (right) *Photograph of the face of a girl and the same photograph overlaid with the motion of an observer's gaze in studying the photograph. The observer was allowed to look at the photograph for one minute and his eye motions monitored using one of the techniques discussed in the text. Notice how, although the gaze sweeps over the face, it returns much more frequently to the eyes than to any other feature. Notice also how the motion is not smooth. The small "knots" represent the saccadic motion referred to in the text. Photograph from Eye Movements and Vision by Alfred L. Yarbus. Reproduced by permission of Plenum Press.*



8.14 (left), 8.15 (right) *Photograph of a bust of Nefertiti, seen in profile, along with the record of a two-minute gaze. Even in profile, the gaze returns to the eyes and to the mouth (as well as to the eye-like ear). Photograph from Eye Movements and Vision by Alfred L. Yarbus. Reprinted by permission of Plenum Press.*



8.16 (left), 8.17 (right) *Sketch of a lion's head by V.A. Vatagin and a record of a two-minute gaze studying the sketch. The observer's gaze is drawn repeatedly to the eyes and the mouth even when the subject is not human. Photograph from Eye Movements and Vision by Alfred L. Yarbus. Reprinted by permission of Plenum Press.*



8.18 L. E. Repin's painting *The Unexpected Visitor*, along with the records of the gaze of seven test subjects in studying the picture. Note that in all cases the attention is drawn to the faces in the picture far more strongly than anything else. One's attention is irresistably drawn to the face in any depiction, and within the face one is drawn to the eyes in particular.

Photograph from *Eye Movements and Vision* by Alfred L. Yarbus.

Reprinted by permission of Plenum Press.

Now, let's return to the shield and consider its purpose. It serves a

useful physical function as a deflector of weapons. But its value can be greatly increased if it can also be used to distract an opponent. The face of the Gorgon is the staring face par excellence. It has large and striking eyes—larger in proportion to the other features than in a real human face, with larger pupils. The mouth, too, is more dramatic than a human mouth, with its many teeth, its fangs, and its protruding tongue. The Gorgon face commands attention, and, as sculpted or painted on the shield, it is much larger than a human face. It is inevitable that the attacker's attention should be diverted to the face on the shield. This is not a criticism of the attacker, or a measure of his stupidity or his lack of skill. As the Yarbus pictures show us, the gaze of a viewer is ineluctably drawn to a face.

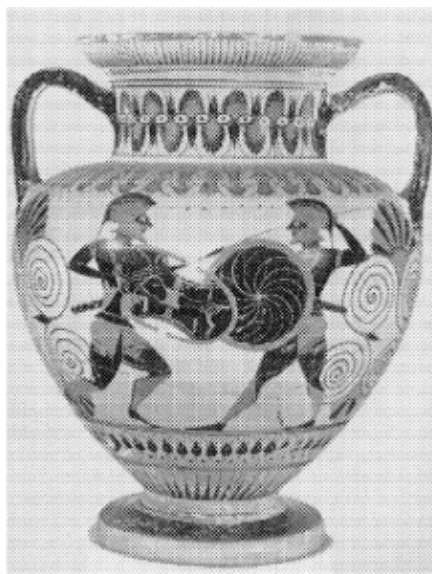
But the deck is stacked in favor of the Gorgon face on the shield. With its great size, its huge eyes and large pupils, its threatening countenance, its active mouth, it exerts a particularly strong claim on the attention of the attacker. If it succeeds in distracting a portion of his attention, if only for a short time, then it has done its job. It has given that much of an edge to the possessor of such a shield, whose attention is not distracted in turn by *his* enemy's shield. This affords him some small advantage in parrying a blow or exploiting an opening.

What proof can I offer that this is the intended function of the Gorgon on the shield? Consider the other shield devices we know from Greek art. I have seen a great many examples of spiral patterns, in which the shield is completely covered with arcs radiating from the center, dividing it into curved sectors that are then painted in highly contrasting black and white. The effect is almost hypnotic, drawing the eye toward the center of the shield. Remember that the shield device need not hold the attacker's gaze for long—just long enough to be a distraction. The spiral shields certainly do this. In other examples, a single eye occupies the center of the shield, or attractive feminine legs. None of these designs is convincing as an apotropaic device or a protective mechanism. But all are singularly effective distractions.

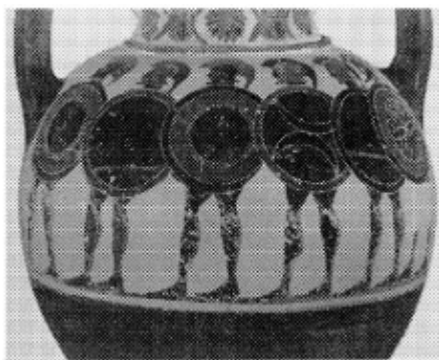
A Gorgon on a shield appears in a work by Dioskourides, a third-century B.C.E. epigrammist from Alexandria. It is mentioned in the *Palatine Anthology* (6.126) and tells of the Cretan warrior Hyllos dedicating a shield with a Gorgon face, surrounded by three legs:

The Gorgon that turns men to stone and
eke the triple knees He bade them paint:
you'll find them there, saying to all they
meet "Look not thou down on me, my foe;
that look of thine will freeze."⁴

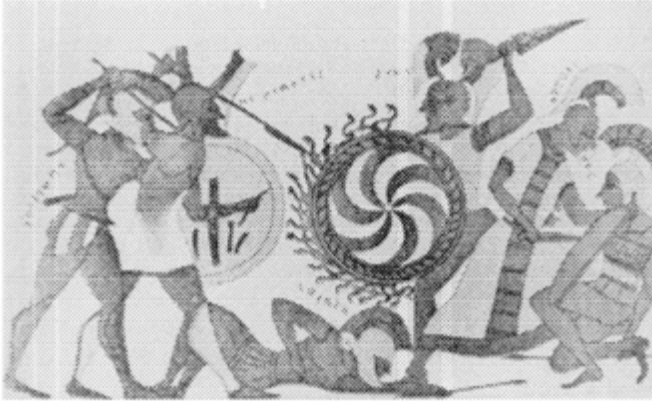
I have seen it argued that a warrior does not want to have a shield that draws attention, the idea being that a single such flamboyant shield among a number of nondescript shields will attract the attention of several attackers, resulting in the probable death of the bearer. This is, I think, the wrong way of looking at the situation. If all shields have such devices, then no one individual stands out. Yet in single combat the shield can function very effectively as an attention-grabbing device.



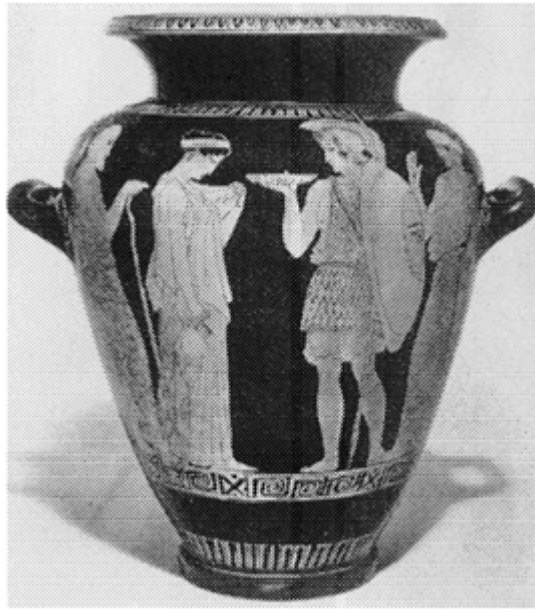
8.19 *Two warriors. An Attic black-figure Amphora circa 530 B.C.E. Again, the shield contain an eye-catching spiral design. Photograph Courtesy of the Museum of Fine Arts, Boston, Henry Lillie Pierce Fund.*



8.20 *Six warriors with shields. This is the opposite side of the vase in figure 8.6. Even though the shields do not have Gorgoneia or spirals, they still have striking, simple designs. Photograph courtesy of the Museum of Fine*



8.21 (top), 8.22 (bottom) Drawings of the picture on an Attico-Ionian Amphora from Caepo in Etruria, now in the Louvre. Note the eye-catching spiral design on the shield of Zeus. This could serve the same distracting purpose as the eyes of the Gorgon. Illustration from A. B. Cook's *Zeus: A Study in Ancient Religion*. Reproduced with the permission of Cambridge University Press.



8.23 *Warrior departing from home. A red-figure Stamnos Vase, circa 430 B.C.E. There is one eye, or possibly a pair of eyes, in the center of the shield. Even without the rest of the face, this would arrest the observer's attention.*

Object in the Museen Antiken Kleinkunst, Munich. Photograph courtesy Hirmer Fotoarchiv, Hirmer Verlag.

Consider, too, the shield of Hercules, as described in the poetic fragment of that name. Its surface abounds in staring figures:

In the center was Fear (Phobos) worked in adamant, unspeakable, staring backwards with eyes that glowed with fire. His mouth was full of teeth in a white row, fearful and daunting.

Fate was there ... and terribly she glared and gnashed her teeth.

And there were heads of snakes unspeakably frightful, twelve of them; and they used to frighten the tribes of men ... for they would clash their teeth.

Also there were upon the shield droves of boars and lions who glared at each other, being furious and eager ... the fierce boars and

the bright-eyed lions.

And on the shield stood ... deadly Ares the
spoil-winner himself. ... Beside him stood Fear (Phobos)
and Flight.

And upon the awful heads of the Gorgons great
Fear (Phobos) was quaking.

And behind them were the dusky Fates, gnashing
their white fangs, lowering, grim, bloody,
and unapproachable. ... By them stood Darkness of
Death. ... She stood leering hideously.⁵

It will be recalled that I (and several others) have suggested that Phobos was another interpretation of the face that is now called the Gorgon. I suggest as well that some of the other horrors of war depicted on the shield—Pursuit, Flight (brother of Phobos), Tumult, Panic, Slaughter, Strife, Uproar, and Fate—were also conceived as Gorgonlike, staring heads. Even without these, though, the shield is awash with staring, menacing faces.⁶ The shield of Achilles in *The Iliad* also features these characters—Strife, Uproar, and “ghastly Fate” are all there, amid less threatening scenes.

The face on the breastplate, which many have taken to be the aegis, served the same purpose. Staring forth from the attacker’s chest, the face of the Gorgon diverted the gaze of the enemy, giving the attacker the slight edge he would need. Putting the face on both the shield and the breastplate could offer the warrior thus armed a double advantage. This, I believe, is the true explanation for the face on the aegis—not the remnant of an animal cloak, with its great, clumsy, lolling head, but a carefully crafted element of distraction.

I do not mean to imply that the ancient Greeks purposely set out to put Gorgon faces on their shields and breastplates for the purpose of distracting their opponents. I think that they probably experimented with several shield devices, from a human desire to decorate things, or perhaps to identify individual fighters in battle. But it was found that shields decorated with the Gorgon face had an almost magical power to protect their bearers. They seemed slightly luckier in combat. The positive value of the Gorgon face was recognized, although the reason the image conferred this special advantage might not have been known. In time, then, its use was attributed to the mythical family most associated with shields, and this most excellent device was naturally applied to the shield and breastplate of the battle goddess

Athena.

The New Guinea tribes dwelling along the Sepik River found the same thing—the local Gorgon variant placed on their shields somehow made them more effective, so it became their standard decoration. The Mayans found that both the Gorgon shield and the breastplate were effective, just as the Greeks had, and so they used both.

So, I suggest, the face of the Gorgon on the shield or the breastplate was actually a practical device, aiding the bearer for reasons he may not have been aware of. It requires no great leap of the imagination to see how its use can have come about, since similar distracting elements were also common shield devices. Elsewhere in the world, other people noticed the same results, and by a sort of convergent evolution they, too, developed shields with Gorgon faces.

One thing I have not explained is why the Gorgon face, specifically, ended up being the one used. We can easily understand the use of a large face, with exaggerated eyes and a scowling mouth. But why the protruding tongue? The question is important. In principle, one would expect any large, staring face to work as well—yet there are no other large faces apart from Gorgon faces. And the parallel shields from New Guinea and Central America also feature Gorgon faces, complete with the tongue. Why is this?

The reason, I think, is that the Gorgon face was used because it was the best example of a fearsome staring face. It was, as I have said, the staring and threatening face par excellence. This means that it was a preexisting artistic motif that was adapted for a particular use on shields. So, what was the Gorgon in the first place? We will answer that after examining another use of the Gorgon face, and some closely related figures, in the next chapter.

GORGONS AND GARGOYLES

But apart from this, in the cloisters, before the eyes of the brothers while they read—what is that ridiculous monstrosity doing, an amazing kind of deformed beauty and yet a beautiful deformity? What are the filthy apes doing there? The fierce lions? The monstrous centaurs? The creatures, part man and part beast? The striped tigers? The fighting soldiers? The hunters blowing horns? You may see many bodies under one head, and conversely many heads on one body. On one side the tail of a serpent is seen on a quadruped, on the other side the head of a quadruped is on the body of a fish. Over there an animal has a horse for the front half and a goat for the back; here a creature which is horned in front is equine behind. In short, everywhere so plentiful and astonishing a variety of contradictory forms is seen that one would rather read in the marble than in books, and spend the whole day wondering at every single one of them than in meditating on the law of God. Good God! If one is not ashamed of the absurdity, why is one not at least troubled at the expense?

—St. Bernard of Clairvaux,
Apologia, ca. 1125 C.E.

BERNARD'S *Apologia*, IN PARTICULAR the section that has been designated "The Things of Greater Importance," has often been cited as an example of a medieval ascetic condemning the apparently useless and pointless extravagance of gargoyles on cathedrals.¹ In fact, a careful reading of the work shows that he never mentions gargoyles by name, and that he is probably referring to carvings on the capitals of columns (since he refers to them as being *inside* buildings), and possibly to those depicted in illuminated manuscripts and wooden carvings. As I will show in due course, medieval gargoyles are thought to date from after 1200 C.E. (although gargoyles as such existed far earlier than that), so it is not likely that Bernard had those architectural elements in mind when he wrote his invective. Nevertheless, his descriptions fit gargoyles very well, and the saint would almost certainly have used the same words to comment on them.

The question he posed has been asked many times since. What are odd sculptures doing on the tops of cathedrals? They have been copied on secular buildings as well, and virtually every major city now has

some gargoyles looking down from the heights. What are they? And why are they there?

There have been plenty of attempts to answer these questions. They are apotropaic monsters, frightening away evil with their own evil faces. Or they are the sculptors' way of expressing their individuality in the rigidly defined world of cathedral building. Or they are survivals of pre-Christian pagan worship, surreptitiously worked into carving on the temples of the new faith so that they may continue to oversee hallowed ground. Or they are inspired by fossil bones, dug up and puzzled over by medieval minds. Or they are concrete expressions of the terrors of the absence of God as described in the Twenty-second Psalm:

Ravening and roaring lions
open their mouths wide against me.

There's no denying that they look incongruous up there, gaping mouths and fierce gazes peering out from sacred buildings as if threatening the communicants instead of evil influences. Could these really have been symbols of pagan worship? Is there a point to symbolizing the loss of God this way? Wouldn't an artist choose to express artistic individuality by rendering a more beautiful figure, such as a horse, or geometrical forms, or even a nude?

Clearly there is a similarity between the gargoyles and the Gorgons. Gorgons, too, were placed along the outsides of temples and public buildings in ancient Greece and Rome. Gorgons appear on vases, shields, and coins, but one of the most common places for them to turn up is along the edges of roofs. The Gorgon is one of the most common images to grace antefixes, the terracotta semicircular tiles that line the edge of tile roofs. Many of the largest and most dramatic Gorgoneia appear on antefixes, although this fact is not usually stressed in art books that picture them. Nor do the illustrations in those books give a true feeling for the antefixes. A roof would have its entire edge bordered by these, so that one could see Gorgon face after Gorgon face, side by side for the length of the building. Gargoyles typically appeared only at intervals along a roof, but Gorgons defined the entire edging. What was the point of having all those staring, tongue-lolling faces leering out from the temple? Even if they were there as apotropaic devices, to frighten off malign forces, wouldn't one or two have been enough?

I believe that there was a very real purpose behind the face of the Gorgon on the antefix, one that extended well beyond a need to frighten off vaguely defined evil influences. A similar purpose lies

behind the gargoyles as well, and the principles are still in use today, although we may not recognize them. Before we look more closely at this, however, it is important to understand the subject. We need to explore the history and design of antefixes and of gargoyles.

Pliny the Elder ascribes the first use of “masks” on the antefixes of buildings to a potter named Butades. This brief, tantalizing reference is all he offers us. There is no attempt to date Butades or to explain why such faces should have been put on the tiles. Greek antefixes date back to at least the seventh century B.C.E., and even the earliest ones we know of were decorated, rather than being just blank semicircles of terra-cotta. They came into common use shortly thereafter, and we have a great many examples from Sicily, southern Italy, and the Greek islands—as well as from the Greek mainland—dating from these early days.

Tile roofs were a great improvement over earlier coverings. They made a house waterproof and were impervious to fire. Although there were many variations on the basic shapes, the central idea was the same. Tiles were made with a U-shaped cross section and were laid down in rows, side by side, with the higher rows overlapping the lower ones, in the way modern shingles do. The ends of the U faced upward, and if that’s all there was to the roof, it would not adequately protect the house, because water could get down in between adjacent tiles. The gap between these tiles had to be covered. This was done with another U-shaped tile, which was placed with its concave side downward, so that it covered the space between the original two tiles. Water running off the curved part of this tile would collect in the trough of one of the two adjacent tiles and be funneled off the roof. Each row thus consisted of two different types of tiles—one set that rested on the wooden roof with concave faces up, the second set placed over the joints between these tiles, concave faces down. The tiles closest to the eaves were laid down first, with successive rows overlapping the ones beneath, then a row of capping tiles was placed to cover the ends of the topmost tiles at the peak of the roof. The tiling terminated at the ends of rows with decorative tiles called *akroteria*.

From the ground, an observer could look up into the spaces formed by the concave-down tiles. These defined “tunnels” that ran from the edge of the roof all the way to the peak. To close off these spaces, Greek rooftilers created the antefix, whose semicircular shape was exactly suited to seal the end of the tunnel. In time, more antefixes were added between these useful ones that sealed the holes, so that they created an unbroken row of semicircular tiles along the entire roof edge. Not only did this look better, but it created a gutter along the edge of the roof. The drainage ran off through spouts at the

corners.



9.1 The three main systems of roofing tiles—Laconian (left), Sicilian (center), and Corinthian (right). Courtesy of Yale University Press.



ANTEFIXES AND TILE ENDS OF SIDE, LATE SEVENTH CENTURY



SLANTING CORNICE OF END, VERY EARLY SIXTH CENTURY



GUTTER OF SIDE, VERY EARLY SIXTH CENTURY



ANTEFIXES OF RIDGE, EARLY SIXTH CENTURY



ANTEFIXES AND GUTTER OF SIDE, EARLY SIXTH CENTURY



SLANTING CORNICE OF END, EARLY FIFTH CENTURY



ANTEFIXES AND GUTTER OF SIDE, EARLY FIFTH CENTURY

The blank, semicircular antefixes must have looked better than the bare, dark tunnels of the roof tiles, but they must still have seemed unfinished, because virtually all the antefixes we have today are decorated with paintings or reliefs. At first these took the form of somewhat abstract “floral” designs, the kind that F. T. Elworthy thought might be stylized octopodes. Eventually, however, these were replaced by faces, just as Pliny says Butades used. Many of the faces were Gorgons—the complete archaic type with the large, staring eyes, ringlets of hair, fangs, and protruding tongue. But there were also bacchic faces, resembling the god Dionysus as he was represented on cups and vases, and the faces of goddesses. These were among the few cases in which gods and goddesses were, like the Gorgon, presented *en face*, staring directly out of the antefix at the viewer. No antefix seems to display any other sort of scene or style of portrait—there are no three-quarter views, for example, no reliefs depicting battles, or the Trojan Horse, or Oedipus and the Sphinx. Why this restriction of subject matter? Why only *en face* deities, Gorgons, and floral patterns?

This solution to the roof problem was not restricted to Greece. There is a long tradition of antefixes in China and Japan as well. The evolution of the finishing tiles in those places seems to have echoed the development in Greece: the antefix is created as a means to seal off the unsightly tunnel at the end of a row of convex roofing tiles. The Chinese and Japanese apparently didn’t develop the gutter, as the Greeks did, and they seem to have favored, in addition to the antefix, a special end tile with a plug on the end. The portion of this tile that faced the ground was round instead of semicircular, but it still bore a decorative image. Similar plug tiles are the preferred way to terminate a row of roofing tiles today in the United States, although now the end is left undecorated.

The Chinese, however, adorned both antefixes and plug tiles, as well as akroteria (which they also developed). Chinese decorations showed much greater variety than their Mediterranean models. Some tiles had writing on the ends (Chinese ideograms), others showed three-lobed yin-yang symbols or flower blossoms. But a great many bore Gorgonlike faces, as well. Many of these show a startling resemblance to the Greek Gorgon, right down to the boggle eyes, fangs, and protruding tongue.

This type of tile roofing doesn’t seem to have caught on in India, or anywhere else between Greece and China. It may be a product of diffusion, but I believe both the mechanical design of the antefixes

and the Gorgon figure to have been cases of convergent evolution. The form of the tiles was the same in Greece and China because it was dictated by the same physical situation. The similar subject matter evolved for a different reason. The Greek antefix spread west into Sicily and Italy, then throughout the Roman Empire. The Chinese antefix spread eastward to Japan.

Before trying to account for the similarity of the Gorgons on Eastern and Western antefixes, let's look at the history of a related device, the gargoyle. The similarity between the names *gargoyle* and *Gorgon* may not be coincidental. *Gargoyle* derives from the French word *gargouille*, which in turn comes from the Latin *gurgulio* ("water spout"), which ultimately derives from the word for "throat." Scholars have traced the word *Gorgon* back to the Sanskrit *garj*, meaning a throaty rumble or scream.

The standard history of the gargoyle was put together by the architect Eugène-Emmanuel F. Viollet-le-Duc in the mid-nineteenth century, in two works written for the Commission des Monument Historiques in Paris. Viollet-le-Duc based his conclusions on a study of French cathedrals, especially those of Paris. There were no gargoyles earlier than 1200 C.E., according to Viollet-le-Duc. The choir of Paris, dating from the time of Maurice de Sully (ca. 1190), lacks both gutters and gargoyles. Gutters were added to the structure about 1210, and the water that collected in these drained off through channels in the gutter. By 1220 true functional gargoyles first appeared in Laon Cathedral. These gargoyles were made of two stones—a lower one that had a channel for the water, while the upper one formed a cover to keep off debris. Some of these were rudely carved in the form of beasts. Usually there were very few gargoyles relative to the length of gutter to be drained, so the amount of water passing through each was large. Within a few years, architects began to multiply the gargoyles, putting in more and more to decrease the flow volume through each. They also began to lavish care on the form, and over the next few centuries the art of the gargoyle blossomed. Viollet-le-Duc believed that no two medieval gargoyles in France were alike.



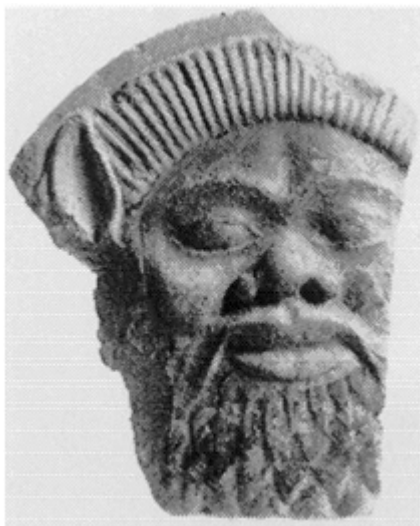
9.3 *Gorgoneion antefix from southern Italy. Courtesy of Museum of Fine Arts, Boston, Otis Norcross Fund.*



9.4 *Gorgoneion with sphinxes. Terra-cotta antefix from southern Italy. Courtesy of the Museum of Fine Arts, Boston. Purchased by contribution.*



9.5 Gorgon probably an ant Terra-cotta, six century B.C.E. Courtesy of the Arthur M. Sack Museum, Harva University Art Museums, gift O Frederick M. Watkins.



9.6 Antefix in the form of a satyr's head. Terra-cotta, ca. 470–450 B.C.E. Courtesy of the Arthur M. Sackler Art Museum, Harvard Art Museums, bequest of Frederick M. Watkins.



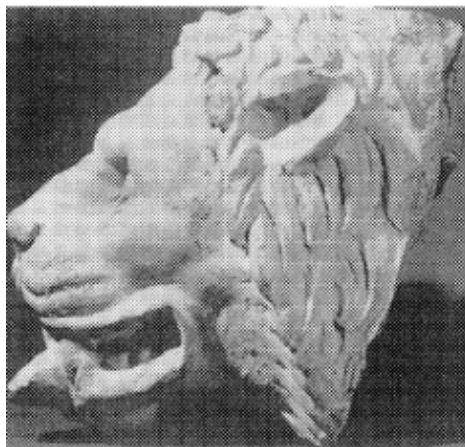
9.7 Antefix in the form of a Silenus. Terra-cotta, circa 470–450 B.C.E. Courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, bequest of Frederick M. Watkins.



9.8 Onigawara end tile from Japanese tile roof. This example dates from the Edo period, circa 1668. It serves the same purpose as a Greek antefix in closing off the end of a row of tiles. As antefixes often do, it bears a staring, scowling monstrous face. There does not appear to be a lineal connection between these oriental antefixes and those of classical Greece and Rome. This suggests that the resemblance might be a case of “convergent evolution” in architecture—the faces on the end tiles served the same purpose. I propose that this was not simply a vague apotropaic function, deterring evil influences, but that the faces served a more direct and practical purpose—scaring away nesting birds that might have harmed the roof. Photograph Courtesy of the Peabody Essex Museum, Salem Massachusetts.

But Viollet-le-Duc’s medieval French gargoyles, although they might arguably represent the best examples of the art, do not represent the whole of its history. Numerous gargoyles predate those of Laon Cathedral, even within France itself—a gargoyle found in Alesia that has a human head for a spout has been dated to around 160 C.E. The medieval versions probably represent an independent rediscovery of the utility of gargoyles.

Gargoyles were common in the Greco-Roman world, appearing at Pompeii among other places. The Parthenon at Athens displays gargoyles in the form of lions’ heads. Similar lion-head gargoyles were found on the temple of Apollo at Metapontum in Italy and the temple of Hera at Croton. Elsewhere, spouts took the form of wolves’ heads.



9.9 (left), 9.10 (right) Gargoyle (*waterspout*) in the form of a lion head.
Terra-cotta, circa 330–320 B.C.E. Courtesy of the Arthur M. Sackler Museum, Harvard University Art Museums, bequest of David M. Robinson.

Astonishingly enough, there were even gargoyles on buildings in the Middle Kingdom of ancient Egypt. One wouldn't think that they would be needed in the desert, but it does rain along the Nile, and the buildings there had to be protected as they did anywhere else. These gargoyles were similar to the ornate models found in Greece, Italy, and medieval France in function only—they were not carved into animal forms and lacked even the covering stone Viollet-le-Duc describes. The U-shaped troughs were probably hollowed-out logs that carried runoff from the roof over the edge of the portico.

Finally, the gargoyles of China resemble those of Europe, taking the form of open animal mouths. An example from the site of Yan Xiadu dates from the third or fourth century B.C.E.

The romance of the gargoyle has not been lost, and examples abound in the United States, dating from the nineteenth century on. Gargoyles on buildings at Princeton University were designed by Gutzon Borglum, the sculptor better known for Mount Rushmore and Georgia's Stone Mountain. Some of the Princeton gargoyles take very modern forms—a lecturing professor and a rushing football player, for example. Classical gargoyles adorn the City College of New York, and art deco gargoyles were placed on skyscrapers in New York City. Not everyone was pleased with these contemporary attempts. "In modern work the gargoyles rarely appear to be happily joined to the building," wrote G. R. Redgrave in the *Magazine of Art* in 1882. "They are either badly placed; or they are clumsy; or they are too slender, slim and weak in outline, deficient in character, or wanting in invention. They lack, in fact, the appearance of reality so remarkable in the old work,

being frequently impossible and even ridiculous imaginings, without a touch of the quality of style.”

On the whole I can’t agree with Redgrave. I think there are plenty of striking gargoyles, many of them functional, to be found on modern buildings. But there are also many poor examples—sculptures whose shapes are not determined by function, or bastard cases like the gargoyle on the Furness Building in Philadelphia, which has a drainspout protruding from its jaws. The gargoyle was supposed to perform the function of a drainspout; instead, it looks like a dragon undergoing endoscopy

So what are they for, these great carved spouts? Everyone agrees that they began their existence as functional items. Look for a building that has neither gutters nor spouts, on which the rain rolls down to the edge of the roof and drips straight to the ground. The ground around the building is marked by the force of those trillions of drops. Each one exerts only a small force, but in time that cumulative force contributes to serious erosion. If the roof’s edge lies over concrete, you can see where the drops have gradually worn away the cement that binds the concrete together, revealing the bare stones in the mix. In the ancient world the problem must have been much worse. The accumulated water would undercut foundations and wear away stones.

Also, if the water were not carried away from the roof by some means, it could penetrate the walls and run down the interior, weakening the structure, rotting the wood, and ruining any painting on the walls. Jean-Louis Ceneval thinks the Egyptians used gargoyles and other water-diverting constructions to prevent ugly streaks on the wall decorations.

Today, if you want to divert the water from your roof you buy gutters and downspouts from a hardware store. The obvious way to achieve the same results in the ancient world was to hollow out a log and place it where it would lead directly to the gargoyle, and this is precisely what many people think the ancients did. “Three simple gargoyles, perhaps round wooden shafts hollowed out on their upper side, protrude from the entablature,” says Alexander Badawy of an Egyptian model of a temple. “Nowhere more clearly than in the gargoyles of Gothic churches does one perceive that a wooden prototype has been repeated in stone,” wrote Charles de Kay in 1906. “It is plain that a log bored or channeled lengthwise to form a waterspout has been finished in some eccentric shape—a chimaera, a harpy, a nondescript beast.”

Having redirected the stream of water from the roof to a point some distance from the building, the ancient Egyptians or medieval

Europeans felt no need to convey it formally to the ground, so they didn't devise a downspout. Once away from the building the stream could fall free, broken into droplets that spread their soft, destructive force over a larger area, no longer undercutting the foundation or threatening to run down the inside of the building. Downspouts are a modern invention.

Like the bare antefixes of the Greek temples, the simple gargoyles of either wood or of stone must have cried out for ornamentation. "But if we could see the streets of medieval towns exactly as they were before the age of Gothic Churches," wrote de Kay, "perhaps we should detect here and there grotesque animals on the spouts carved of wood on such dwellings as ambitious burghers loved to ornament otherwise with carvings and pictures."

But why the fierce heads of dragon like monsters? Why lions? Surely the choice of these creatures was due to the same impulse that drives the builders of modern fountains to direct jets of water out of the mouths of animal and fish sculptures—because water *does* come out of real animals' mouths. Because, although one could have water spurting from the penis or the anus of a human male figure, or from the breasts of a female form (and all of these possibilities have been realized in gargoyles and fountains at one time or another), to do so is a coarse jest, in very poor taste. It's better to be spit upon by a monster head than to be pissed on—or worse. Surely this reasoning alone explains everything, doesn't it?

If that were truly the case, then there would be no riddle of the gargoyle. But through the years, from St. Bernard to Stephen King, people have been asking why the gargoyles must have such odd, ravening faces. Why scowling dragons and lions? Why reptilian forms so at odds with the sacred intent of the buildings? There are a few humorous gargoyles, like those at Princeton, or the coarse, excreting gargoyles mentioned above, but these are far in the minority. Why demons on the buildings? The same question goes for those antefixes with the Gorgons—what are these leering faces doing on the outside of public and religious buildings? What are they trying to frighten away?

The answer, I believe, is both surprising and mundane. Look closely at the edge of a Greek or Chinese roof from which the antefixes have been removed. What's left is a series of regularly spaced tunnels formed by the convex tiles that seal off the spaces between the base tiles. The tunnels go all the way up to the peak of the roof. They may be ugly, but that by itself wouldn't dictate that you cover them up. People have lived with far uglier elements in their architecture. If something has been deliberately added, it's usually because there is a functional purpose to the new part, not because it

serves an aesthetic need. The antefixes don't significantly help to make the roof more waterproof. They might help hold the tiles on, but that's a secondary function. If the weak terracotta antefix had to bear the weight of all the tiles above it, it would fracture in short order. The antefix was placed on the roof, I think, in order to seal up that inviting hole against incursions by birds.

Birds seek to nest in protected sites well above ground level and not much larger than themselves. If they can, they seek out sites protected from the weather in which to build their nests. The tunnels on tile roofs must have been perfect. They were about tree-height above the ground, dry by design, roofed against wind and rain from above. There was no direct access from the ground, making the birds safe from nest-robbing predators. Even if some enemy should get onto the roof, it would probably be stymied in its efforts to reach into the hole between the tiles on an overhanging roof.

The Greeks and the Chinese must have independently discovered that their tile roofs had become coveted birdhouses, and both must have regretted the fact. It's not just that the birds created a nuisance, leaving droppings beneath the roof edge. (Although that, by itself, is reason enough. At the end of the twentieth century, entire businesses exist whose sole purpose is to clean up bird droppings on the roofs of gas stations and other businesses.) The movement of the birds going in and out, feeding the young hatchlings and enlarging the nest, would start to break up the roof from within. I have seen this happen with asphalt roofing. The problem is a continuing one, as a nest built one year continues to be used in succeeding years. And once the tiles crack or separate, damage to the roof begins and can only get worse. The idea is to prevent the birds from nesting there in the first place, and the obvious solution is to seal up any inviting openings. Enter the antefix, devised independently in the East and the West. The Chinese even make special closed-end tiles to completely eliminate the problem.

But no tile is perfect. Frequently there are gaps between the antefixes and the lowest tiers of tiles, and birds can force their way in. Cracks can develop in the tiles that give them an edge. The best thing to do is to keep the birds away from these places, if you can. It doesn't hurt to keep them off the roof altogether. How can that be accomplished?

This problem isn't confined to the ancient world, of course. Eliminating birds has become a big industry. Bird-X of Chicago sells a variety of instruments, chemicals, netting, and barbed wire to keep birds out of places where they aren't wanted. The company also sells Terror-eyes, an inflatable yellow balloon with huge red and black eyes on it, designed to scare birds away. Pest Management Supply

Company sells Scare Eye balloons for the same purpose. Flambeau Corporation of Middlefield, Ohio, manufactures decoys of various sorts, but they also sell plastic Great Horned Owls in two different sizes, “for even more effective pest control.” Dalen Products of Knoxville, Tennessee, also sells such owls. A great many other companies manufacture plastic or ceramic owls for the same purpose—to scare away birds from fields, courtyards, and buildings. The owls, with their huge, yellow staring eyes, are effective in keeping pigeons away from popular roosting sites in the angles and on the ledges of buildings. If modern businesses can sell these staring-eye constructions for the purpose of keeping birds away (and earn a tidy profit while doing so), then why couldn’t ancient terra-cotta manufacturers have done the same? If we accept Pliny’s account as accurate, then Butades was the first businessman to cash in on this system for passive bird deterrence. Those masks of Dionysus, goddesses, and Gorgons all had one thing in common—huge, striking, staring eyes.

Nor is that all. Consider the floral patterns that preceded the masks. A close look reveals that these, too, had the appearance of a face with eyes. Most of the “face” is only vaguely indicated, but the constant feature is a pair of curlicues or circles about where the eyes should be. E. Douglas van Buren, in his classic volumes *Greek Fictile Revetments in the Archaic Period* and *Archaic Fictile Revetments in Sicily and Magna Graecia*, even explicitly calls these features on floral antefixes “eyes.”

This, then, is the reason for the resemblance between the floral patterns, noted by F. T. Elworthy, and the Gorgon. The octopus is not the common ground between them—it is their common application as bird-scarers on antefixes. I suspect that even Butades and the earliest potters did not truly understand the significance of these faces and eyes—they only knew that those designs seemed to work. I view the resemblance of the floral patterns to faces as a case of evolution into useful form. Over time, it was found that when certain patterns were used on the antefixes, the roof tiles would last longer for some reason, and that the most successful of these were the ones that looked more like faces. This reasoning process led to the use of more facelike florals, then masks, and ultimately Gorgoneia, which was (as I said in the last chapter) the staring face par excellence. The same process took place in China, producing Gorgon faces on the antefixes by the same process.

Similar “staring eye” patterns developed in nature through a process of true evolution, and for precisely the same purpose—to scare birds. The mantis *Pseudocreobotra wahlbergi* has a pair of striking eyespots on its wings, yellow spirals within dark circles, with a dark “pupil” at each center. The eyed hawk moth (*Smerinthus ocellatus*) has

such eyes on its hind wings. A Cassidid beetle of British Guyana, *Pseudomesomphalia contubernalis*, has eyespots on its wing cover that have been described as “like yellow penetrating orbs each with a black pupil.” The Brazilian butterflies of the genus *Caligo* have such eyespots on their hind wings. “Here,” says zoologist Hugh B. Cott, “the appearance reaches a high degree of perfection. ... No one who has seen the insect, with its wonderful gleaming ocelli [eye-spots], can fail to be impressed both by their beauty and by their general deceptive resemblance to the eye of some large vertebrate such as an owl, and it seems reasonable—in view of analogous instances and observations—to conclude that the staring eye-spots would be mistaken in the gloom by insectivorous birds and mammals for something on no account to be meddled with.” Sphinx moths and hornworm caterpillars also have such display spots that they reveal when threatened.

Recall, besides the Chinese and Japanese antefixes, the other Gorgon parallels. The Japanese Daruma doll is well known as a wishing doll and good-luck symbol, but it has another use in Japan that is not as well known. Large papier-mâché Daruma dolls with both eyes prominently filled in are set up in rice fields to protect the crop from the depredations of birds. There might be a suggestion of an appeal to the supernatural here, but the figures are undisputably effective scarecrows. It is surely not a coincidence that Daruma’s animal emblem is the owl.

The Maori carvings that so closely resemble Gorgons, with their mother-of-pearl eyes and protruding tongues, were placed atop buildings, chiefly storehouses. Gable paintings featuring huge eyes formed from concentric circles, alternating light and dark, appear on the facades of men’s huts in New Guinea and New Zealand. The Kayan of Borneo paint the top of the *salong*, or mortuary hut, with a huge face featuring staring eyes. Everyone acknowledges that all these faces are apotropaic, meant to keep something away. I suggest that among the malign influences the eyes repel are roosting and nesting birds, which can be as destructive to the roof, house, and its contents as any evil spirit.

Does this really work? Assuming my theory to be correct, does placing a glaring face near a tempting site actually keep birds away? Considering that whole businesses are based on filling precisely this need, it’s surprising how little data there really is on the topic. Most of the information we do have is anecdotal, and scientists don’t generally like to rely on testimonials of effectiveness—after all, claims for the virtues of all sorts of quack remedies are a dime a dozen. Patent medicine bottles from the nineteenth century were covered with such assurances by satisfied customers, but that didn’t prove that the products really worked.

Nevertheless, a trickle of reports in respectable journals offer some hard evidence. E. C. LaFond, writing in *Naval Research Reviews*, noted that the installation of commercially available two-faced owls with glass eyes on a Navy electronics laboratory's research tower near Mission Beach in San Diego was effective in deterring seagulls. (The owls had faces on both sides—why waste a perfectly good owl silhouette by leaving it nonthreateningly blank on the back?) The Navy had considered using noises, electric shocks, repellent paints, and natural predators to control the birds, but none of these means was thought to be effective for a frequently unmanned tower. "The owls were left in place for a period of five weeks, during which time personnel were not continuously aboard," noted LaFond. "Inspections, made several times a week, revealed no fresh gull litter, so it seemed that the owls had been a success. However, during the ensuing month, when the owls were removed, the gulls still did not return. ... It thus seems clear that imitation owls, along with other agitations, have succeeded in breaking the apparently ingrained habit of seagulls to seek out the same roosting place. ... Although perhaps no one factor broke the seagull obsession with the tower, the imitation owls appear to have loomed largest." At the time the report was written, the owls appeared to have kept the gulls away for over a year.

Professor Ronald J. Prokopy of the Entomology Department at the University of Massachusetts at Amherst quantified his study of the effectiveness of Scare-Eyes™ balloons by studying the changes in bird damage to a fifty-tree apple orchard. The fruit was a disease-resistant stock but still suffered some attacks by disease, insects, and, most especially, birds. From 1985 to 1987, before Prokopy began testing, bird damage affected 12.2 percent of the fruit, more than twice as much as disease and insect damage combined.

In 1988 Prokopy attached a single balloon one yard above the top of the tree at the center of the orchard. Trees were four yards apart in each row, with the rows six yards apart. At the end of the season, he found that the incidence of damage caused by birds to trees within six yards of that center point was only 1.5 percent. Trees within twelve yards had an 11.7 percent injury rate, while the injury to trees within eighteen yards was 20.6 percent. Clearly the balloon with owl eyes had a deterrent effect.

During the next two years he placed balloons every twelve yards throughout the orchard. The results were dramatic—a 0.4 percent injury rate in 1989 and 0.9 percent in 1990. He felt that the balloons were most effective against crows, starlings, bluejays, and possibly blackbirds, but less effective against robins and orioles.

Another manufacturer produces the similarly named Terror-Eyes balloons. A flyer distributed by the Bird-X Corporation claims that the

Terror-Eyes balloons were developed by the Agricultural Experiment Center of the Tokyo metropolitan government, but none of their testing results have been made available, to my knowledge. The flyer indicates that the balloons have been used effectively by wineries in France, an agricultural research center in Britain, a military base in Switzerland, and a Frito-Lay plant in Cucamonga, California.

It must be acknowledged that motion certainly helps the eyed balloons to repel birds. Prokopy admitted that the movement of his balloons in the air currents helped keep birds away from his fruit trees, and that this is why he had to suspend them above the treetops. The eyes on Terror-Eyes balloons are aided by lenticular arrays—the same technology used to give the illusion of motion to pictures on plastic novelties, CD cases, and videotape containers—which make the balloons seem to be moving even when they aren't. And, in a particularly damaging blow to the idea that the eyes alone can frighten birds away, researcher Michael J. Conover actually found that crops of tomatoes watched over by his large-eyed owl figures were protected when the figures were moved by motors or wind wheels, but were actually more heavily devastated by birds than a control patch when they were not!

Nevertheless, evidence from the Navy study, the Japanese Daruma figures, and the manufacturers of fixed ceramic and plastic owls would seem to argue that even a stationary figure of a predator can have a deterrent effect. Under these circumstances, I am surprised that the classic American scarecrow has never acquired large, staring eyes, instead continuing to rely mainly on its resemblance to a human figure to deter crows. As has been observed, scarecrows frequently don't.

Surely the reader has guessed my suggestion about gargoyles by this time. Gargoyles are essentially the drainspouts of the gutters of Egyptian, Greek, Roman, and medieval buildings. Drains don't work very well if they are blocked by bird's nests, so the spouts were incorporated in the form of the mouths of large-eyed, glaring animal heads. Most writings about gargoyles have centered on their generally outré appearance, and there has been little comment on the eyes. Many gargoyles have fanged and snarling mouths. Why should they look so fierce, if not for some good reason? The gargoyles of Greece and Rome didn't look like the reptilian horrors of France, but they were equally threatening wolf and lion heads, always with prominent eyes.

The architectural elements visible below the Great Dome at MIT, above its columns, were clearly inspired by classical Greek models, right down to the animal-head gargoyles. There are no bird droppings beneath them.

In two recent media productions, gargoyles are closely associated with birds: the Disney adaptation of *The Hunchback of Notre Dame* shows birds nesting in the open mouth of a gargoyle, while a recent liquor ad shows a closed-mouth gargoyle with feathers protruding between its lips. Both sets of illustrators, I think, came closer to the truth than they knew. Birds don't just nest in any old place. They are very selective in their choices of habitat. A prospective nesting site must be the right size, the right distance from the ground, and the right distance from other nests. If my theory about antefixes and gargoyles being defenses against nesting birds is correct, then, we ought to be able to identify which birds we are defending against. The spaces covered by antefixes are a few inches in diameter and some tens of feet above the ground, and there are many of them in relatively close proximity. The mouths of gargoyles possess the same features although, depending upon the location, they may be much higher above the ground.

One pretty obvious candidate for tenancy is the common pigeon (*Columba livia*). Pigeons live in close proximity to humans, as everyone who has walked through a public park knows. They nest on the ledges of a building and among its ornamentation (evidently a variation on their original habit of roosting on rock ledges), in spite of a current half-joke that no one has ever seen a baby pigeon. If there were one bird that we would try to dissuade from nesting on our buildings, it would be these pests. Pigeons have little fear of people, and the droppings in the vicinity of their roosts are plentiful. Pigeons like relatively open ledges or places with holes about eight inches in diameter. Their nests can range from as little as ten feet above the ground to several storeys up.

Another obvious choice is the starling (*Sturnus vulgaris*). Starlings have a reputation as dirty birds. They have no objection to roosting in large communities, and they can be a noisy lot. There were no starlings in the Americas until they were artificially introduced in the nineteenth century. Having no natural predators, they quickly spread and became pests. There is no reason to think that they were any more beloved in their native Europe.

Tile roof openings and gargoyle spouts are ideal nesting places for starlings, who prefer holes at least one-and-a-half inches in diameter that stand ten to thirty feet above the ground. They roost in congregations of hundreds to thousands, so obviously they don't mind having other nests nearby. Starlings are particularly aggressive in their nesting and will not hesitate to appropriate the nest sites of other birds.

The house wren (*Troglodytes aedon*) doesn't seem as offensive as the pigeon or starling, but it shares some of their nesting patterns. The

small bird is unexpectedly aggressive in its search for nests, like the starling. Wrens are territorial, however, and will go so far as to destroy the nest and even the eggs of a competitor. They prefer tree holes or manmade sites about two inches in diameter, four to thirty feet above ground.

Many of the stone features on medieval buildings that are called gargoyles have nothing to do with drainage spouts. Serious architects and cathedral-lovers prefer the terms *chimera* or *grotesque* for these freestanding, nonfunctional figures. *Chimera* is derived from the monster that Bellerophon overcame, and the term is relatively recent. *Grotesque* derives from *grotte*, meaning an underground chamber (related to the word *grotto*). It is supposed to derive from the sixteenth-century excavations of the then-underground Golden House in Rome, originally built by Nero but submerged beneath many centuries of dirt. The works of art uncovered there inspired several artists, particularly Raphael, who borrowed from them for his decoration of the Vatican.

Primarily, grotesque designates these Classic and Renaissance symmetrical interlacings of conventionalized plant forms with fantastic and human and animal shapes, satyrs, centaurs, and similar fabulous creatures, heads, masks, and festoons, birds and insects, arms and armor, vases and allegorical figures of virtues and vices. Only by a monstrous perversion of the word can grotesque be twisted from Renaissance to Gothic.²

Whatever the nomenclature, what concerns me here is the relationship between these nonspouting figures and the gargoyles and Gorgon antefixes. The former don't cover anything, so why make them threatening? I believe that these odd figures and faces, too, served a useful purpose. They adorned ledges and angles, just the places pigeons and other birds used for resting and sometimes nesting. Some looked amazingly like the plastic owls manufactured today—glaring-eyed, spread-winged owls set into the angles inside buildings, or outside near a ledge. Some of the grotesques in English churches are astonishingly Gorgonlike, their contrasting, staring eyes keeping watch over prime bird real estate.

But we're not yet finished. Consider the capitals we call Ionic. These tops of columns have a delicate, scrolllike appearance that differentiates them from the earlier, simpler Doric form. What is this design meant to represent? Why put a scroll atop a column?

Many Ionic capitals deviate somewhat from the "classical" scroll form. The curls are much closer together, as in the capitals found at

Delphi. Such capitals bear a close resemblance those “floral” antefixes with their curlicue “eyes.” The tops of these columns “stare back” at the viewer and might serve to deter birds that would otherwise frequent them.

For a long time I wondered if there might be a parallel to the Gorgoneion or gargoyle in Islamic Arabic art. The Muslim religion forbids the depiction of living creatures in art, so by extension there should not be any fantastic creatures adorning Muslim architecture. Yet if the advantages of such bird-detering features as I suggest were real, Muslim artists and architects could have been expected to adapt those objects to their own style or to develop them independently. After all, Muslim art, being forbidden to use animals, developed geometric ornamentation and tessellation to a high pitch. Surely something resembling the Greek floral antefixes would be both effective and allowable under Islamic law. And indeed, the capitals atop the columns at the Great Mosque of Cordoba and the Alhambra fulfill these expectations. They are copiously fitted with circular “eyes,” as are the Delphic capitals.

There is one more prominent place where frightening Gorgon eyes appear—on Greek bowls and cups, as demonstrated by many examples in museums around the world. Sometimes a Gorgon face appears in the center of the inside of a cup. Much more commonly, a pair of huge eyes is painted on the outside of the cup. Much larger than human eyes—more like those of the owl—they appear particularly striking because they are painted in high contrast. The eyes have vivid whites as well as huge and dark pupils, surrounded by an eyelike silhouette. Sometimes are formed by concentric circles of alternating light and dark, forming a hypnotic “bull’s-eye.”

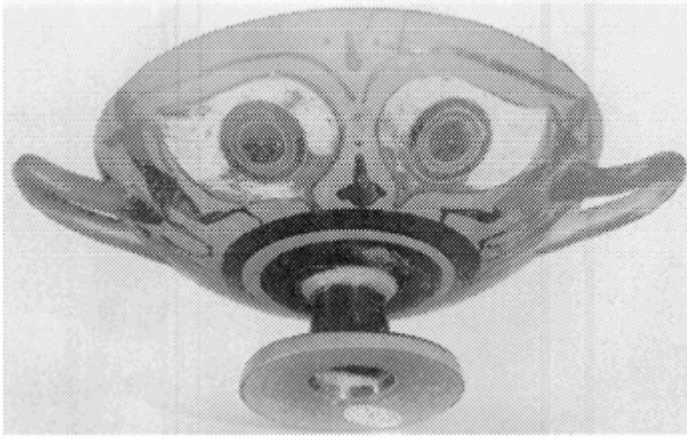
The relationship between these eye-cups and the Gorgon are made clear by the incorporation of Gorgoneia into the design of the cups. In some cases the Gorgon face is set smack between the two eyes. In other cases the Gorgoneia fill the pupils of the eyes. There can be no doubt that these eyes were meant to be apotropaic, but why? It’s not as if they were protecting a temple from malign influences. The best they could be said to do was to protect a drink. Worthy a goal as that may be, no one seriously proposes it as an explanation. Some, like Françoise Frontisi-Ducroux, suggest that the design offered protection to the person who drank from the cup. When the cup was tilted and the drinker was concentrating on the wine, the eyes might be protecting the drinker’s vulnerable throat. Or perhaps they were intended to provoke contemplation of supernatural things, even death itself.



9.11 Kylix (eye-cup—a drinking cup decorated with large staring eyes). An Attic black-figure cup circa 525–500 B.C.E. Courtesy of the Museum of Fine Arts, Boston, Francis Bartlett Collection.



9.12 Kylix (eye-cup). An Attic black-figure cup circa 520–500 B.C.E. Note the Bacchic face between the eyes. There is a Gorgoneion in the interior of the cup. Courtesy the Museum of Fine Arts, Boston, Henry Lillie Pierce Fund.



9.13 *Kylix (eye-cup)*. Attic black-figure cup circa 550–500 B.C.E. Courtesy the Arthur M. Sackler Museum, Harvard University Art Museums, bequest of Joseph C. Hoppin. There is a Gorgoneion in the interior (reproduced as figure 3–3).

All of this seems pretty grim to me. And besides, Gorgon-eyed bowls are only part of a grand tradition that covers much wider territory. Gorgon heads also appear on the handles of ancient Greek food containers. In some cases, jars and bottles were made entirely in the shape of Gorgon heads. In others, the Gorgon head is attached to the handles of the vessel so that it stares protectively across the open mouth of the vessel.

Need I go further? The Gorgon faces, especially the eyes, were placed on containers to dissuade creatures from pilfering the contents. After all, cups could contain other drinks than wine (although the Greeks were very specific in the intended purposes of their crockery). I think the use of the Gorgon in such cases was intended to go beyond scaring birds to include frightening small mammals as well—for instance, mice and squirrels. Although some people feel that scarecrows, of debatable value against birds, are even less useful against the much smarter rodents, these same people will buy the plastic and ceramic figurines sold today in an attempt to keep rabbits out of their gardens.³

Many storage jars and vases from around the Mediterranean are adorned with circles around the neck. These circles, either painted or incised, are almost invariably in pairs. Often they take the form of concentric circles, striking because of their high contrast, and almost hypnotic. They may appear on the necks of vases or near the tops of “face pots” that usually lack any other resemblance to faces. There has long been a belief among many scholars that these widespread figures

represented, if not a single cult, then the track of a belief that spread from the Near East and around the Mediterranean into northern Europe. The most influential single volume about this phenomenon is O. G. S. Crawford's *The Eye Goddess* (1957), in which Crawford draws together all the evidence linking these figures and a primitive mother goddess. "The great megalithic tomb builders of Western Europe were imbued with a religious faith," wrote a supporter, G. E. Daniel, the year after Crawford's work was published. "[They] were devotees of a goddess whose face glares out from pot and phalange idol and the dark shadows of the tomb walls, whose image is twisted into the geometry of Portuguese schist plaques and the rich carvings of Gavrinis and New Grange."

Much skepticism has greeted Crawford's claims since his book was published, although it has been muted. "It is probable that such statements reveal more about the faith of prehistorians than about that of the megalith builders," noted Andrew Fleming in "The Myth of the Mother-Goddess" (1969). "There is in fact an urgent need to re-examine the whole hypothesis."

I myself am skeptical of theories of a single prehistoric cult of such wide dispersion, if only because it is so large. Crawford doesn't present any evidence that the cult was united or homogenous. To my mind, he doesn't even present evidence showing that those rings and circles on the mouths of jars are goddess symbols at all. His evidence, in short, seems much like my own evidence for the wide occurrence of the Gorgon face around the world—except that I make no claims that these occurrences had a single origin or purpose, something Crawford does claim for his goddess symbols. Even Miriam Robbins-Dexter, in her introduction to a recent edition of Crawford, noted, "Crawford's usual careful methodology was lacking in *The Eye Goddess*." Robbins-Dexter cites many modern theories for the origin of the eye symbols. For all I know, these may be quite correct. But I maintain that the reason such eye-circles appeared consistently on storage pots was that they had a very real and useful purpose—they deterred pilferage by small-brained creatures. The potters may have placed them there because it was traditional to do so, or because they hoped the god or goddess would protect the goods within, or for a great many other reasons, but the symbols remained because they actually did work.⁴



9.14 Greek and Etruscan vases. Note the vase in the upper right in the form of a Gorgon head. Courtesy of the Museum of Fine Arts, Boston.



9.15 *Vase in the form of a Gorgon head. Courtesy of the Antikensammlung Staatliche Museen zu Berlin, Preussischer Kulturbesitz.*

So there you have my theory explaining the use of Gorgons on antefixes and their relation to gargoyles. In essence, I claim, both were there to deter birds from nesting in roofs and drainpipes, thereby destroying the one and rendering useless the other. So effective was the deterrent that the Greeks and the Chinese independently discovered the value of Gorgon antefixes (which later spread to Italy and Japan), and the Borneans and Maoris also used the figure on the gables of their storage and meeting huts. The Greeks, Chinese, and French independently discovered the value of the carved gargoyle. I suggest, as well, that the same “evolutionary” forces that produced the Gorgon also produced floral antefixes with “eyes” and the Ionic capital.

The same use of the Gorgon on pots, cups, and vases scared away small mammals as well, protecting the food within. This practice, too, was independently discovered throughout the ancient world and was widely used on pots in many cultures. Remember the Chinese T’ao-T’ieh, the glutton? Legend had it that he was put on the side of food jars as a warning against overeating. I think this is a later rationalization to explain the scarecrow on the pot.

My support for my theories is that staring owl faces are even now being used as passive bird deterrent devices, and that this is the basis on which several companies now produce plastic and ceramic owls

and high-tech balloons.

Why did the Gorgon face also appear on these objects? The Gorgon was not exclusively used, even in Greece. Bacchus, for example, also appears on antefixes and on cups. But the Gorgon was, I assert, the staring face of choice. Among the pictorial archetypes of ancient Greece, the Gorgon was one of the very few depicted *en face*, staring out at the viewer, and thus was one of the few with two large, staring eyes. For this reason, the Gorgon became the face used on bird-deterrent objects, just as it was the distracting face used on the shields and breastplates. It is why Athena had the head of the Gorgon on her aegis.

What is curious is that others, elsewhere in the world, felt the same way about this type of face. This is why there are Gorgonlike faces on antefixes in China and Gorgons on the shields and breastplates of the Maya and the inhabitants of the Sepik River in New Guinea. It's why Gorgons glare down from the gables of buildings in Borneo and New Zealand. All of these people knew that face and declared it the Staring Face, the obvious choice for these uses.

All of which raises the question: What, exactly, was the Gorgon? Earlier chapters have suggested why the Gorgon appeared on antefixes, gables, shields, breastplates, and cups. They have explained how elements of the Gorgon myth are dictated by the astronomical features of the constellations. But none of these things explains the Gorgon's features themselves. Any staring figure might have answered for all of these causes. Why it is specifically the Gorgon that has the protruding tongue, the wide grin, the ringlet hair, and the staring eyes? Why did people find this face particularly frightening? This is the subject we address in the next chapter.

WHAT THE GORGON REALLY WAS

In Greek and Roman tradition, Medusa was the most famous of the three Gorgons, the serpent-haired sisters whose glance was literally petrifying, and who, as the bright schoolboy wrote, “looked like women, only more horrible. “... These grotesque representations must be classified among the few real failures of Greek art; to the modern mind they seem about as frightening as a Halloween mask designed by a six-year old child.

—Robert Burnham Jr.,
Burnham’s Celestial Handbook, 1978

*The Gorgon was a maiden bold
Who turned to stone the Greeks of old
That looked upon her awful brow.
We dig them out of ruins now,
And swear that workmanship so bad
Proves all the ancient sculptors mad.*

—Ambrose Bierce,
The Devil’s Dictionary, 1911

THE QUOTES THAT OPEN THIS CHAPTER are diametrically opposed to the one that opened [Chapter 3](#), in which Humfry Payne called the Gorgon “one of the most remarkable creations of the archaic period.” I agree with Payne (although I should note that many of the Gorgon parallels from other cultures encroach pretty heavily on Greek originality), but I see the points of Burnham and Bierce. If the Gorgon is meant to be an apotropaic device, as so many claim, then what sort of lily-livered attacker is it capable of scaring off? To be sure, it has the features of a scowling monster. But be truthful—who would really be afraid of that face? Doesn’t its frequent appearances on antefixes, on shields, and on cups and jars dilute what little shock value it may once have had? After all, we in the twentieth century no longer see Gorgons everywhere we look, but even we are used to the sight. In ancient Greece and Rome, as I’ve shown in the last few chapters, the Gorgon was a common motif, repeated endlessly around the roofs of temples and other buildings, staring from the tops of pots and jars, looking out from over the doors of ovens. Was this a face so frightening that it could turn a man to stone?

As is often the case, I think that the inability of the Gorgon to impress our modern sensibilities is the result of our not getting the whole picture. The Gorgon would be much more horrible if we knew what it really was. It's not that odd face by itself that's so terrifying, but what it implies. Renditions of the Gorgon are as stylized as anything else in ancient art, and that stylizing is itself a mask, hiding the unbearably awful reality beneath. This isn't just hyperbole on my part. At the date of this writing (1999), you can see surgical operations in all their gory glory on basic cable television. On the premium channels you will find plenty of sex and violence. But no one has yet shown you the face of the original inspiration for the Gorgon.

So what is this original figure? For a clue, we must consider all those Gorgon parallels I brought up in [Chapter 4](#). In addition to the seventh-century B.C.E. Greek Gorgon (and other Greek parallels), we have the Egyptian Bes from 2000 B.C.E., the head of Humbaba from as early as 2750 B.C.E., Kirtimukha in India from much more recently, Kali in her present form from perhaps about 400 C.E., and Rangda in Indonesia. In China the figure dates back to the eleventh or twelfth century B.C.E. How far back the Maori carvings and those of the Northwest Coast go isn't known. The Chavin metalworks in Peru date from 800 B.C.E., but the Teotihuacan, Mayan, and Aztec parallels are much later, coming from about 100 B.C.E., 700 C.E., and 1400 C.E., respectively.

As I've pointed out, some of these parallels are astonishingly alike, and I find none of them questionable (there are a great many other, less probable, parallels I could easily drag into the discussion). More important, they often appear to be serving the same functions—Gorgon shields in Greece find exact parallels in Mayan shields and those from of the Sepik River. Gorgon faces over oven doorways in Greece parallel the Kirtimukha faces over temple doorways in India. Gorgon antefixes in Greece exactly duplicate Gorgon faces on antefixes in China and Japan. These depictions and uses, however, don't show any pattern that could tie them together into a logical whole. In a perfectly ordered and logical world, the oldest depictions of a Gorgonlike ancestor would appear in one place, such as Mesopotamia. The further you got from this Gorgonic Eden in time, the further you would get from it in distance as well. The trail of evidence documenting similar uses would show a continuous and even spreading of that use as it was carried from place to place, moving through the settled districts over time. But the Gorgon seems to have leapfrogged from place to place, showing up in one place long after it had appeared elsewhere, with no obvious connection between the new location and other areas where Gorgon art was produced. Gorgon antefixes emerged in Greece and China without ever seeming to have

passed through en route. Gorgon shields aren't found anywhere between Greece and New Guinea, or between New Guinea and Central America.

From time to time people try to tie a few of the Gorgon parallels together into some sort of chain. So Miguel Covarrubias tried to build a family tree of South American and Central American Gorgons, and G. F. Eckholm, Douglas Fraser, and a great many others have tried to find a common path for the Gorgons of New Zealand, China, and the Pacific Northwest. Clark Hopkins was sure that Humbaba had developed into Medusa; A. B. Cook believed it more likely that Bes provided the germ of the idea. Each of these separate constructions, however, though it may tie a few of the parallels together, fails to account for the great mass of other parallels.

I believe that most of these parallels are truly independent, and that Covarrubias, Hopkins, and the others are barking up the wrong tree. The great spread in space and time convinces me that we must find some other explanation besides diffusion to account for all those similar faces. I don't believe in any sort of telepathic or encoded "collective unconscious." Barring the possibility of time-traveling von Däniken extraterrestrials to account for the spread, we must turn to something more basic. The Gorgon must represent something common to all those cultures—something the people could see and interpret for themselves, but in much the same way that others did.

This was the feeling of F. T. Elworthy, whom we met back in [Chapter 4](#). Elworthy, you will recall, was convinced that the octopus lay at the heart of the Gorgon myth. That decapitated, snaky head with its staring eyes was really the head of a cephalopod with tentacles waving, its eyes so uncannily like the human eye in function and appearance. Elworthy gleefully noted, after his initial lecture on the subject, that there were parallels to the Greek Gorgon from South America and from New Zealand, both areas that were quite familiar with the octopus. All these cultures had interpreted the features of the octopus as a severed human head, with the same sort of mouth, perhaps inspired by the parrotlike beak and the tonguelike siphon.

But I have to ask if this theory is really likely. Why should the Aztecs, living in the center of Mexico a mile above sea level, have known or cared about the octopus? Why would they have associated it with the sun god or the earth monster? Wouldn't it have been more appropriate simply to associate it with the sea? Is it likely that the octopus or squid was responsible for any of the Indian parallels? Octopodes certainly don't occupy a central position in the culture or diet of India. And how about the parallels from noncoastal China? Is it really likely that all of these groups would see the siphon as a tongue? Wouldn't at least one or two draw that parrotlike cephalopod beak as

a parrot beak, instead of turning it into gritted teeth and fangs? Use of stylization and abstraction is one thing, but this theory would require that everyone subscribe to the same brand of anthropomorphization. Even if representatives from the artistic communities of each group were gathered together in a room, I don't think you'd be able to persuade them all to render the octopus as exactly the same kind of human face.

That unlikelihood is what finally convinced me that basis for the Gorgon was not the face of the octopus. By the same token, I don't believe the other explanations that have been offered, either. At least the octopus does possess features that everyone could conceivably (if not very probably) have metamorphosed into the same face. But why would both the Aztecs and the Greeks have put pop-eyes and protruding tongues on the face of the sun? Or moon? Or stormclouds? Could the Maoris have been inspired to come up with their Tiki faces or the Chavin of Peru to have devised their metalwork images by the sight of gorillas or lions? Whatever the Catoblepas really was, could it have inspired the T'ao-T'ieh or the other Chinese parallels?

It doesn't seem likely to me that we can designate some animal as the root of the Gorgon, since no one animal spans the geographical range of Gorgon parallels. The sun and moon seem unlikely to have produced such universally similar features as well; even if we grant that those round sky faces inspired the *en face* aspect, they cannot account for the unique facial features. The question is, what item, common to the experience of a broad range of humankind, could produce a humanlike face with huge, staring eyes, broad nose, wide, gritted-toothed grin, protruding tongue, facial lines, and stylized hair?

We are not familiar with the answer because it is kept from us, deliberately. At one time in our history it was a much more common sight, just as deliberately placed in view. Much of the time, it was simply considered inevitable. But it was distasteful at best, horrifying at worst, and so over time it has been carefully removed from immediate view, a process that has now gone on for so long that the object is no longer familiar.

"Nothing is inevitable except Death and Taxes," said Daniel Defoe (followed by Benjamin Franklin and many others). But taxes were collected only with the rise of civilization. Death has been the great common experience of humankind since the beginning.

After death the body undergoes a number of changes. The core temperature declines, the blood pools, rigor mortis sets in, then retreats. The body's defenses against the onslaught of bacteria shut down, and it begins to decay. The rate of decomposition depends on the surrounding temperature and other environmental factors.

Generally, it is not until one or two weeks have gone by that the corpse begins to expand from the pressure of the gases generated by decomposition. The results of this process are dramatic. The tongue begins to swell, pushing itself out of the mouth. The eyes swell as well, and they protrude grotesquely from the sockets. Sometimes a bloody fluid leaks from the mucous membranes around the eyes. The face bloats, broadening all the features. The lips may pull back from the teeth. The hair begins to detach itself from the scalp. In other words, the body begins to take on the characteristic features of the Gorgon.

You might think that I am pressing my case too far, exaggerating fringe aspects and pulling them together to create the impression that the putrefying corpse looks like the Gorgon, that by selective restating of the evidence, I could make the corpse resemble any of a number of creatures. But consider the following quotations from textbooks on forensic medicine:

Discoloured natural fluids and liquefied tissues are made frothy by gas and some exude from the natural orifices, forced out by the increasing pressure in the body cavities. The eyes bulge and the tongue protrudes; skin blisters burst and the bloated trunk disrupts.¹

Gas disrupts internal organs which show air sacs. The skin affected likewise begins to reveal blisters with or without slippage. Such changes are ordinarily seen in bodies dead 3 to 5 days. In another day or two generalized swelling of the tissues begins and the face and the abdomen become bloated and the eyeballs and tongue protrude.²

In other words, these Gorgonlike features are the most notable and visible signs of progressing decay. They mark the characteristic appearance of a body that has been dead for one to three weeks without undergoing any sort of embalming. Our own lack of familiarity with this state is due to our rapid treatment of the deceased. Bodies are rushed to coolers to retard the action of bacteria, then treated with antibacterial fluids and preservatives. In the ancient world, however, unless burial followed soon after death, these changes of decomposition would have been familiar to everyone, especially in those cases in which the body was deliberately kept from burial.

In addition to the facial resemblance between corpses and the Gorgon, I think we can detect other features that also relate to Greek Gorgon parallels. The dark skin coloring, from “green to purple to black,” recalls Pausanias’s description of Eurynomos, the figure painted on the wall of the clubhouse at Delphi. This figure was blue-

black in color, “like the flies that settle on meat.” Jane Harrison thought that Aeschylus cribbed his description of the Erinyes (Furies) from the Gorgons, but the description of them in *The Eumenides* does not seem to come from a later, “sterilized” Gorgon portrait. It exudes the real feel of decay:



10.1 *Photograph of a corpse after more than 48 hours. The gases of putrefaction have caused internal swelling. This makes the eyes pop, the tongue protrude, and makes the face round. The hair has begun to separate as well. All of these features are prominent in the Gorgon and its parallels.*

Photograph from Keith Simpson's Forensic Medicine, fifth edition.

Reprinted courtesy of Edwin Arnold Publications, London.



10.2 *Photograph of a corpse dead for more than 48 hours, seen in profile. This is a different subject than in figure 10.1, but the same protruding eyes*

and tongue are clearly seen. Photograph from anonymous donor.

They are black and utterly repulsive,
and they snore with breath that drives
one back. From their eyes drips the foul
ooze.³

Similarly, in *The Libation Bearers*, the Furies are said to be “repulsive for the blood drops of their dripping eyes.”⁴ Harrison thought that the foul ooze was a representation of the power of petrification, but I think that the interpretation I offer here is more direct and intellectually satisfying.

This identification of the Gorgon with the putrefying corpse (and thus with death) seems obvious in retrospect. In its first appearance in Greek literature, the Gorgon head is the monster of Hades, the realm of the dead. The figure of Eurynomos is the monster of hell, represented in a scene illustrating the same passage. Apollodorus puts Medusa in the land of the dead, and Virgil places the Gorgonlike Erinyes there as well. Other parallels from elsewhere in the world continue the theme. Kali lives in the cremation grounds of the dead. The Tiki figures of New Zealand represent dead ancestors. In Mexico the lord of the dead is Mictecuhtli, with his skeletal rictus grin and protruding tongue. The other Gorgon-faced deities, Tonatiah (or Xochipilli-Piltzintecuhtli) and the earth goddess Coatlicue, are also associated with the dead. So is Xolotl, the Gorgon-faced evening star. The Gorgonlike faces on masks in New Ireland and on the gables of buildings in New Caledonia and New Zealand are supposed to represent dead ancestors. In Borneo, the face is painted on the sides of mortuary houses and on masks used in mortuary rites. Even if the putrefying corpse weren't a promising candidate for the origin of the Gorgon on grounds of a shared human experience, its claim would be strengthened by this widespread association with death and ancestors.

As I've noted, the sight of a decomposing corpse was more common in the ancient world than it is today. One reason for this was certainly the lack of modern mortuary technology, but another was surely that burial was sometimes deliberately avoided. The plot of Sophocles's *Antigone* revolves around such a denied burial. In *The Iliad*, Achilles retains the corpse of Hector in order to defile it, denying it burial and dragging it by the heels around the walls of Troy. Only the efforts of the gods, standing in as morticians, prevent the destruction and decay of the corpse.

Battlefield corpses, too numerous to bury, would decay in just such a fashion described above. This particular phenomenon has continued

from ancient times down to the present day, of course. After the battle of Gettysburg in the American Civil War, a Union artilleryman noted:

The dead bodies of men and horses had lain there, putrefying under the summer sun for three days ... corpses swollen to twice their original size, some of them actually burst asunder with the pressure of foul gases and vapors.... Several human or inhuman corpses sat upright against a wall, with arms extended in the air and faces hideous with something very like a fixed leer, as if taking a fiendish pleasure in showing us what we essentially were and might at any moment become.⁵

Another custom that delayed burial was the practice of beheading an enemy or criminal and displaying the head on a pike at some prominent location. This practice had an especially useful purpose in cultures where most people were illiterate—it unequivocally announced that a given person was dead. Sir Thomas More and Bishop John Fisher of Rochester, opponents of Henry VIII of England's break with the Roman Catholic Church, were beheaded and their heads displayed on Tower Bridge. So were Lady Jane Grey and her husband, twenty years later. The British continued the practice until 1747, when Lord Friser de Lovat was beheaded and his head piked on Tower Bridge. The British needn't be singled out, of course—the French also displayed the heads and the quartered bodies of executed notables. Similar horror stories from throughout Europe and the rest of the world abound. In Bronze Age Europe there was a Cult of the Severed Head that decorated many displays and shrines with detached heads.

Decapitation did not eliminate the bloating and gas pressure of decomposition—the body is not one big bag of gas, which a single rupture can deflate. The individual tissues each become distended by putrefaction, so even a decapitated head can acquire the Gorgonian bulging eyes and protruding tongue.

Forensic specialists have observed that, in the case of a drowning victim, the head may, in fact, separate from the body without external force. Decay simply loosens the linkages between the torso and the head to such an extent that the two can separate with little provocation, and such a putrefying Gorgonian head can be left to drift at sea or be washed on shore. Is this, perhaps the reason the Greeks associated the Gorgons with the sea?

This particular representation of death was dropped from the iconography of Western art rather quickly. If the Gorgon head is a stylized representation of a newly decaying body (as I believe), then although in this form it came to be a standard figure, the more

realistic depiction of it never did attain such status. Bloated carcasses rarely appear in art, even down to the present day. The symbol of death is usually a skeleton or a mummified corpse, in which tightly stretched skin barely covers the underlying skeleton. An army of such skin-and-bones dead men marches on humanity in Pieter Brueghel the Elder's 1562 painting *Triumph of Death*. The skeleton itself is familiar from many memento mori paintings. But there is a dry, impersonal feel to these animated skeletons. It's too easy to dismiss the notion that they were once housed in living human bodies, that those dry bones ever had any connection to the organic.

The decaying corpse that lies behind the Gorgon is, I maintain, an altogether more horrifying symbol of death precisely because it is inseparable from a living, breathing human. Tolstoy captured the essence of this horror in his reminiscence, *Childhood, Boyhood, Youth*, in which he describes himself, as a young boy, looking at the corpse of his mother only one day after her death:

I stood on a chair, in order to see her face; but I imagined I saw in the place where it ought to have been the same pale yellow, translucent object. I could not believe that it was her face. I began to look more closely at it, and by degrees recognized the familiar features which were so dear to me. I shuddered from terror, when I convinced myself that it was she. But why were her closed eyes so sunken? Why this terrible pallor, and the black spot under the translucent skin on one of her cheeks? Why was the expression of her whole face so severe and cold? Why were her lips so pale, and their position so beautiful, so majestic, and expressing such an unearthly calm that a cold chill passed over my back and hair, as I looked at her?

I looked, and felt that a certain incomprehensible, irresistible power was attracting my eyes to that lifeless face. I riveted my gaze upon it, and my imagination painted for me pictures abloom with life and happiness. I forgot that the dead body, which was lying before me and at which I was looking meaninglessly, as at an object which had nothing in common with my memories, was *she*. I imagined her now in one, now in another situation: alive, merry, smiling; then I was struck by some feature in her pale face, upon which my eyes were resting; I recalled the terrible reality, and again the consciousness of reality destroyed my dreams.⁶

The Gorgoneion is terrible because it shows us the transformation of a human being into Death, and does so by a process that destroys all dignity. The eyes pop out and may cross, the tongue protrudes, the skin discolors and spots, the body bloats, the hair separates, and the

entire thing stinks. It is terrible to see in a stranger, worse to contemplate in a loved one, and shattering to consider that the same fate awaits oneself.

In the stylized image of this process, the Gorgoneion, the more repugnant aspects have been cleaned up. The eyes are piercing, but not disgusting. They do not cross in a ridiculous way. The protruding tongue is neater. The bloating has been rendered in neat form as a broad nose and wide cheeks. The separating hair has become neat curls, the skin blemishes regular marks and lines. It has been made acceptable.⁷

There is a somewhat less terrifying form that may also have influenced shape of the Gorgon, one that is just as universal as death and decay. This is the appearance of a human undergoing a hysterical fit. J. M. Charcot described these in the nineteenth century. In his 1877 work, *Lectures on Diseases of the Nervous System*, he notes the case of a woman he calls Ler——, who underwent fits “characterized in the first stage by epileptiform and tetaniform convulsions,” including “a more or less marked permanent contracture of the tongue.”⁸ His sketch of Ler——portrays her with a Gorgonlike rictus grin, while another hysteric has an excessively protruding tongue. Charcot remarked on the similarities between such hysterical cases and historical cases of demonic possession. The similarities in all respects are indeed striking. Charcot and Paul Richer collected descriptions and depictions of such possessed individuals in their 1887 work *Les Demoniaques dans l’Art*. Two of Richer’s sketches show afflicted women with truly Gorgonian faces, complete with a blank, soulless stare and grotesquely protruding tongues.

A historical example of such a possession occurred in New England shortly before the time of the Salem witchcraft trials. Elizabeth Knapp of Groton, Massachusetts, suffered attacks starting on October 30, 1671, and continuing until at least January 15, 1672. These were reported in detail by her minister, Samuel Willard. Knapp had fits and the sensations of choking. On November 15 “her tongue was for many hours together drawn up to the roof of her mouth, and not to be removed, for some tried with the fingers to do it.” A month later her tongue was drawn “out of her mouth most frightfully, to an extraordinary length and greatness.”⁹

Classical mythology contains a counterpart to these stories of possession in the contortions of Hercules. In his play *The Madness of Hercules* (ca. 424 B.C.E.), Euripides portrays the senseless insanity visited upon the great hero by the gods. Note the description of his appearance:

See him—lo, his head he tosses in the
fearful race begun!
See his Gorgon-glaring eyeballs all in
silence wildly roiled!
Like a bull in act to charge, with fiery
pantings uncontrolled
Awfully he bellows, howling to the fateful
fiends of hell!

.....

lo, he seemed no more the same,
But wholly marred,
with rolling eyes distraught, With
bloodshot eye-roots starting from his head,
While dripped the slaver down his bearded
cheek.¹⁰

Hercules is described as “Gorgon-eyed” (*gorgopis*). Elsewhere in the play, Madness is described as “Night’s daughter, a Gorgon with hundred-headed hiss of serpents, / Madness the glittering-eyed.”¹¹ The identification with Gorgons is hammered home by a recollection of Hera’s attempt to kill the infant Hercules by sending “Gorgon-glaring serpents secretly/Against my cradle, that I might be slain.”¹² The word used to describe the eyes of the serpents is the same as that used to describe the eyes of the maddened Hercules a few lines earlier. In no other account of this incident are the snakes so described. It is clear that to Euripides, at least, the face of the Gorgon was the face of madness.

THE GORGON TODAY

Anyone who wants to travel further by sea and arrive near Jerusalem will go from Cyprus Jaffa, for that is the nearest port to Jerusalem. There is the city of Joppa; but it is called Jaffa after one of Noah's sons, called Japhet, who founded it. And some men say it is the oldest city in the world, for it was founded before Noah's flood. And there are the bones of a giant there who was called Andromeda, and one of his ribs is forty feet long.

—Sir John Mandeville,
Travels, 1356

NO ONE KNOWS EXACTLY WHO Sir John Mandeville was. He claimed to be an English knight, but that claim is probably as false as everything else about him. In 1372 a certain Jean de Bourgogne of Liège in Belgium claimed on his deathbed to have written the *Travels*, and his tombstone identifies him as the knight, but that assertion has come under suspicion, as well. Whoever he was, his book was wildly popular in its day—one of the first printed bestsellers. More than three hundred copies survive from the beginning of the sixteenth century, translated into every European language. Mandeville's book was perused by Christopher Columbus before he undertook his historic voyage, by the explorer Frobisher, and by many others. Like a great many bestsellers since, its charms are not due to the veracity of its contents. It is Mandeville we have to thank for the Vegetable Lamb of Tartary and the Vegetable Goose of the West, among other travel legends. We know that he stole large portions of his book from the works of others without attribution (at least twenty such sources have been identified), and that he bumbled a few other sources together and made up much of the rest. He does have a few supporters who claim to have identified original and believable sections amid all this dross.

But the quotation that opens this chapter is typical. In it Mandeville manages to misidentify the princess Andromeda as a giant, possibly one of those antediluvian Nephilim that the book of Genesis says was on the earth “in those days,” the days of Noah (Genesis 6:4). The idea may have been suggested to Mandeville because he thinks Joppa itself predates the Flood and because of the giant bones. He may have been thinking of the bones supposed to be those of Ketos,

the sea monster, which were said to have been found there, later to be exhibited at Rome. Or perhaps he had a confused recollection of Flavius Josephus's statement that the shackles that bound Andromeda were still to be seen at the seashore at Joppa. Whatever the case, it shows how poor the memory of the story of Perseus and Andromeda could have become by the fourteenth century.

Although knowledge of the classics was never truly lost during the Dark and Middle Ages, familiarity with many myths waned with the advent of Christianity. Works of art illustrating the myths disappeared from pots and public buildings and other objects of everyday life, and the stories became the sole property of the literate class. Gorgonlike figures occasionally surfaced, such as the grotesques and gargoyles we treated in [Chapter 9](#), but I believe these were independent re-creations of the image, bearing little or no direct relationship to the classical models that had preceded them. The monster Grendel in the Old English poem *Beowulf* shows some similarities to the Gorgon, especially when the hero, Beowulf, cuts off the monster's head in triumph, but that is another case of an independent myth.

Just as it faded from art, the Gorgon vanished from the underworld, too. New concepts of hell came from the Bible, from apocryphal sources, and from vision literature. Illustrators, stonemasons, and mystery plays depicted the Mouth of Hell as the literal jaws of a monster, a sort of Kirtimukha swollen to be not merely the guardian of the Gate, but the doorway itself. But the spaces within Hell were populated by fallen angels, bestial demons, monster birds, and the new Christian Devil, derived (some think) from a demonized Pan. Gone were the tortures and fantastical creatures of classical Hades.

A benchmark in the resurrection of the Gorgon is the work of a man instrumental in reintroducing classical mythology in a new guise. Dante Alighieri, poet and scholar, was born in 1265 in Florence. He is best known for his monumental *Divine Comedy*, which gives a tour of hell, purgatory, and heaven in a series of one hundred rhyming triplets, using a form Dante himself devised. The hero of the poem, also named Dante, is escorted through the nine circles of hell before beginning his ascent through purgatory to the heights of heaven. His guide through the underworld is Virgil, author of *The Aeneid*. Much has been made of the fact that Virgil was perceived by thirteenth-century Italians as a prophet (because his *Fourth Eclogue* was thought to have predicted the coming of Christ) and as a mediator between the pagan Rome of the Caesars and the apostolic Rome of Peter and Paul. But surely the main reason Dante chose him as a guide was because he admired *The Aeneid* and because that poem also describes a descent by its main character into the underworld.

Dante clearly cribbs from Virgil's descriptions of Hades. In particular, *The Aeneid* says that the Furies reside right in the entrance hall to Hades's realm. It is there that Juno goes to find Alecto, a Fury who is described in very Gorgonian terms. Virgil also notes that the Gorgons, the Harpies, and Geryon dwell there. The poem's hero, Aeneas, draws his sword at their approach. In Dante's *Inferno*, the hero, Dante, and his guide, Virgil, are stopped at the city of Dis, whose gate guards the sixth circle of Inner Hell. This gate is guarded by the three Furies—Megæra, Alecto, and Tisiphone. The mortal poet and his guide cower in fear as the Furies call up Medusa to turn Dante to stone, saying that they let Theseus off too lightly. Virgil shields Dante's eyes from the sight, knowing that he would turn to stone and be unable to return to the world of the living. They are saved by the intervention of an angel.

It has been said that Dante knew Latin but not Greek, and that his knowledge of Homer was secondhand, but I think he did know Apollodorus, if only in translation. "A foolish consistency is the hobgoblin of little minds," wrote Ralph Waldo Emerson, proving that the great Transcendentalist would not have made a good Trekkie, or comic book enthusiast, or soap opera watcher. Fans of pop culture are frequently obsessive in their knowledge of trivia and in their laborious attempts to keep it all consistent. The Roman poet Ovid was not of this stripe. As I've noted earlier, Ovid had no difficulty with altering myths to suit his purposes. Had he been writing a poem about Sherlock Holmes, he might very well have changed Watson's first name to Percy to fit the meter. Apollodorus, on the other hand, would have been a Baker Street Irregular. Ovid is and was more widely read because his poetry was good—he's one of those "great souls" of Emerson's who don't care for consistency. But scholars who want to know the myths as they were originally told read Apollodorus.

It bothered Apollodorus, it is clear, that Virgil speaks of "Gorgons" in Hades when only one of the monsters was mortal. Certainly there was one Gorgon there, because the great authority himself, Homer, says so. Surely, Apollodorus must have reasoned, this was Medusa, the sole mortal Gorgon, killed by Perseus long before the Trojan War. Consequently, when Hercules visits the underworld in Apollodorus's *Library*, he encounters a Gorgon that Apollodorus identifies as Medusa. Like Aeneas, Hercules draws his sword against her. And, also like Aeneas, he is told that these phantoms cannot hurt him.

Dante, like Apollodorus, mentions only one Gorgon and identifies her as Medusa. It's likely that he got the idea from Apollodorus, although it is possible that he came to the above line of reasoning by himself. The clincher, though, is that the Furies in the *Inferno* say that they shouldn't have made things so easy for Theseus. The reason

Apollodorus's Hercules is in Hades in the first place is to rescue Theseus, who was trapped there in the chair of Persephone. It's unlikely Dante would have mentioned Theseus (rather than Aeneas, for instance) as someone who got off too easy unless he had the lines from Apollodorus in mind.

After Dante came the deluge. The Gorgon had been rehabilitated and began to reappear in Western art and literature. The next major contributor to this renaissance was Leonardo da Vinci (1452–1519). Around 1475 he painted a shield. According to Giorgio Vasari, author of the *Lives of the Artists* (1568), da Vinci's father, Ser Piero da Vinci, presented his son with a rude shield that one of his peasants had made. Leonardo straightened it and had it turned flat and smooth. He covered the new surface with a fresh coat of white gesso, then considered what to paint on it. Vasari says that Leonardo wanted to produce something that would have the same terrifying effect as a Medusa. He gathered together dead serpents, bats, and insects, which he fashioned into a single great creature with poisonous and fiery breath, which he portrayed as emerging from a cave. He carried out all this in secret, in a room he kept locked, and did not even notice that the subjects had begun to decay, so that Ser Piero, coming upon it, was quite understandably taken aback. Ser Piero was able to sell the shield in Florence for a high price, and eventually it ended up in the hands of the Duke of Milan.

The story is a romantic one, and it has its doubters. One detail of Vasari's story can certainly be questioned—he doesn't actually say that Leonardo painted the head of a Medusa. But the Anonimo Gaddiano (1542–1547), says that “he painted a head of the Medusa with strange and remarkable coils of snakes, which is now in the collection of His Excellency Duke Cosimo.”

The shield was inexplicably lost before the eighteenth century. For a long time a painting of Medusa's head in the Uffizi Museum in Florence was mistakenly identified as da Vinci's work, even inspiring two poems—Gabriele d'Annunzio's 1885 “Gorgo” and Percy Bysshe Shelley's better-known 1819 poem “On the Medusa of Leonardo da Vinci in the Florentine Gallery.” The misleading painting is still extant. It shows the severed head lying face-up, crown and right side toward the observer (perhaps so that the viewer is not looking directly at the face and is thus preserved from petrification). This is a modern depiction of a Gorgon, the angry face of a woman who has a generous crop of snakes in place of human hair. The other features of the archaic Gorgon are missing—no fangs, no beard, no huge rictus grin, oversized staring eyes, broad features, or facial lines. There is a frog in the lower right corner, lending some credence to the belief that this was Leonardo's beast-inspired portrait. But modern experts agree that

the style of the snaky headdress is distinctly Flemish, and the style of the seventeenth century at that.

Following Leonardo, many other artists produced classically inspired Gorgon shields. Filippo Negri did one in metal for Carlo V about 1541, and Jorg Sigman constructed one in iron about a decade later. In 1608 Michaelangelo de Caravaggio painted a Medusa head on a round panel that is still in the Uffizi gallery. The head is presented *en face*, but the eyes look down (again, to spare the viewer?). There is a look of horror on the face, the mouth gaping open (but without that archaic Gorgon tongue). The head is crowned with snakes. Was this done in imitation of da Vinci's work? And is it possible that this dramatic portrait, rather than the less impressive Flemish faux Leonardo, inspired Shelley?

Peter Paul Rubens executed his own Medusa head a little later. His shows the head almost in profile, its eyes huge and staring even in death, the red of the severed neck plainly visible. Like the others, it does not look directly at the viewer. Its features are essentially those of a woman, and it is festooned with writhing snakes. A few free snakes wriggle nearby, as well, as if they were molting from the head. Rubens liked the Gorgon head so well that he later included it as an allegorical representation of Discord (in opposition to Hercules as Heroic Virtue) on the walls of the banqueting hall at Whitehall.



11.1 Head of Medusa, a painting now in the Uffizi gallery in Florence. This work was once attributed to Leonardo da Vinci, and was thought to be the work described in Vasari's biography of him. It is now believed to be a Flemish work, dating from the seventeenth century. Photograph courtesy of



11.2 Head of Medusa, a painting by Michaelangelo de Carravaggio, now in the Uffizi gallery in Florence. It has been variously dated at 1591, 1592, 1597, and 1608 by different authorities. This painting inspired two poems on Medusa, one of them by Shelley. Photograph courtesy of Scala/Art Resource, N.Y.

Medusa continued to be portrayed, usually as a head on shields and archways. Benvenuto Cellini's bronze statue of Perseus holding the head of Medusa (1546–54) is one of the most famous of mythology-themed statues. The original is in Florence, but there are copies in the Hermitage, the Victoria and Albert Museum in London, and the Banco di Roma.

John Milton evoked the image of Medusa's head in his 1634 masque *Comus*, and (no doubt inspired by Virgil's *Aeneid*) he populated hell with Gorgons in *Paradise Lost*. The story of Perseus, Medusa, and Andromeda inspired several operas in the seventeenth and eighteenth centuries. Before the year 1800 there were more than twenty-five of them with titles like *Andromeda*, *Andromeda e Perseo*, *Andromeda liberata*, *Persée*, and *Perseo*. They featured elaborate effects and machinery and were later embellished with ballet. One gets the impression that these were the seventeenth-century equivalents of

such special-effects blockbusters as *Star Wars*. Francesco Manelli's 1637 *Andromeda*, for instance, was the first opera to be staged before a paying public. It was underwritten by Manelli himself, who may have used the effects as a way to help fill the house. Perseus rides the winged horse Pegasus to rescue Andromeda, as he does in some of Ovid's poems and in Francisco Pacheco's 1603 painting *Perseus*. A hero on a winged horse is surely more dramatic (and on stage, more visible) than a hero with winged sandals.

Jean-Baptiste Lully's 1682 opera *Persée* doesn't feature as much machinery, and the rescue of Andromeda takes place offstage, described by the chorus. But it does include the spectacle of Perseus's being given his weapons by the gods, along with the spectacular death of Medusa (a tenor), followed by the onstage birth of monsters from her blood.

In Britain, the Gorgon returned to the stage in a different way. Based on Virgil and Milton, the monster was seen as a symbol of hell and became a regular feature of stage hells. Too regular a feature, judging from Alexander Pope's *Dunciad*:

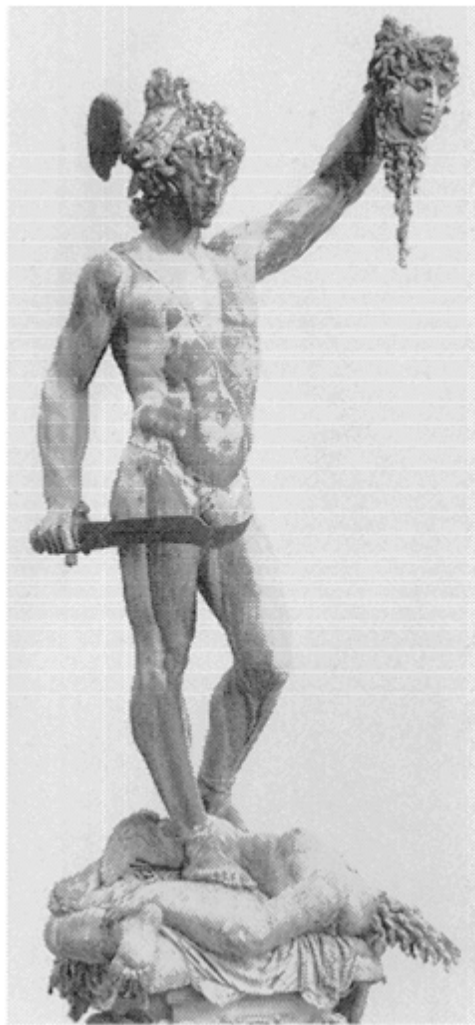
He look'd, and saw a sable sorc'ror rise,
Swift to whose hand a winged volume flies;
All sudden, Gorgons hiss, and Dragons
glare,
And ten-hornéd fiends and Giants rush to
war.
Hell rises, Heav'n descends, and dance on
Earth,
Gods, imps, and monsters, music, rage, and
mirth,
A fire, a jig, a battle, and a ball,
Till one wide Conflagration swallows all.¹

The taxonomists of the eighteenth and nineteenth centuries used their classical training in their Adamlike naming of the beasts. The multitentacled creature that could regenerate lost arms was named the Hydra, after the seven-headed creature fought by Hercules that could grow two new heads in place of each one that was chopped off. In a similar vein, the class of jellyfish was christened Medusa, after the nemesis of Perseus who was now universally represented with snaky hair. The sting of the jellyfish no doubt influenced the choice, being an appropriate counterpart to the petrifying glance of the Gorgon. Due to this bit of classically induced nomenclature, *Meduse* became the French word for jellyfish in everyday language, and other Romance

languages adopted the name. The ancient Roman words for jellyfish were *pulmo* and *halipleumon*.



11.3 Head of the Medusa, a painting by Peter Paul Rubens, now in the Kunsthistorisches Museum in Vienna. It is believed to have been executed around 1617. Photograph courtesy of Erich Lessing/Art Resource, N.Y.



11.4 Perseus Holding the Head of Medusa, *sculpture by Benvenuto Cellini. Photograph from Alinari/Art Resource, N.Y.*

By the nineteenth century Medusa had become a common theme in art, and the story was more widely known once again. Thomas Bulfinch's *Mythology* introduced the Gorgon to a public not familiar with the original classics. Edward Burne-Jones worked on a series of paintings—not all of which were completed—depicting the cycle. Aubrey Beardsley produced his own drawing, possibly in parody of Burne-Jones.

But there was another aspect to the revived interest in the old creature. From the late eighteenth century until the end of the nineteenth, she was a frequently used symbol of the Romantics, who saw her as the Dark Lady, a manifestation of Death. “This glassy-eyed,

severed female head,” wrote Mario Praz in *The Romantic Agony* (1960), “this horrible, fascinating Medusa, was to be the object of the dark loves of the Romantics and the Decadents throughout the whole of the century.”

The twentieth century saw Perseus and Medusa painted by Paul Klee, John Singer Sargent, and Pablo Picasso. Auguste Rodin worked the characters into his bronze sculpture titled *The Gates of Hell*. Medusa also appeared in more operas and ballets and was the subject of a vast flowering of poems, some of which we will look at in more detail a little further on.

In popular culture, the story was made familiar again by Edith Hamilton’s *Mythology* (1942), probably the most popular text on mythology for more than half a century now. Every paperback edition for the past forty years has featured a photograph or drawing of Cellini’s *Perseus Holding the Severed Head of Medusa*, and the spine of the hardcover edition’s dust jacket features the head of Medusa as well. (My paperback edition of Bulfinch’s *Mythology* also has, as its sole decoration, the head of Medusa. She has evidently become one of the most recognizable images of Greek mythology.) Sir James George Frazer, who did so many translations of Greek classics for the Loeb Classical Library, provided his own retelling of the myth in “The Gorgon’s Head: A Fantasia” in *The Gorgon’s Head and Other Literary Pieces* (1927).

Medusa and her story have become familiar to modern Americans largely, I think, through Hamilton’s and Bulfinch’s books, supplemented by many other popular recountings, especially in children’s books. I know from my own youth that the Gorgon was referred to frequently in comic books, including *Justice League of America*, *The Twilight Zone*, and others. *The Fantastic Four* introduced a character named Madame Medusa, who had prehensile hair. (A companion of hers was called Gorgon, but he was a satyr-legged individual who could stamp his feet with devastating effect. I think writer / editor Stan Lee simply liked the sound of the name.) One reason for the popularity of the Gorgon as a comic-book menace is that, like the disintegrator beams of science fiction comics, it can destroy people without leaving bloody remains.

Charles Grandison Finney, a newspaper reporter who spent most of his life in Arizona (aside from a two-year stint in China), wrote occasional short pieces that mixed his southwestern U.S. and Chinese experiences with his broader interests. One of the more interesting pieces was *The Circus of Doctor Lao*, a 1935 book in which the titular enigmatic Chinese intellectual showman brings a most unorthodox circus to the Arizona town of Abalone. In place of the usual freaks and performers, the circus is filled with creatures from Greek mythology,

which the good doctor has captured in most un-Greek locales, such as China. The Medusa he displays “is a Sonoran medusa from Northern Mexico” (!), complete with native (though nonpoisonous) Mexican snakes for hair. Lao provides his clientele with a mirror in which to view the Medusa to prevent their petrification, but one woman ducks past the ropes and is turned into carnelian chalcedony.

Catherine L. Moore’s first published story was “Shamblau.” It first appeared in the magazine *Weird Tales* in November 1933, and it proved to be a strong opening for her writing career. Forty years later, when Moore was being introduced at the World Science Fiction Convention, an audience of two thousand reacted with recognition of the name of the story before Moore’s name was even mentioned. They knew her instantly as the author of “Shamblau.” This story was the first of many featuring a hero with the unlikely name of Northwest Smith, a tough interstellar frontiersman wandering through newly colonized worlds that were envisioned as an extension of the western frontiers.² The title character, apparently a lost and bewildered woman being chased by an angry mob, is rescued by Smith. She is ultimately revealed to be a sort were-creature, whose red hair metamorphoses into snaky locks. She then seems to become a mass of red tendrils, wrapping herself around Smith and enrapturing him, draining out his “life force,” vampirelike. Smith is saved by his friend, Yarl, who is himself almost overcome by her hypnosis until he sees a mirror on the wall. He fires his ray gun at the reflection, killing the shamblau. Moore’s evocation of the Gorgon was conscious, underscored twice in the story itself. Her portrayal of the creature is not unsympathetic, although clearly it is a dangerous being.

Curiously, the Gorgon has not been widely used in science fiction and fantasy. The only other explicit example I know of is Tanith Lee’s short story “The Gorgon” (1983, reprinted in *The Gorgon and Other Beastly Tales* [1985]). In this tale, a young English vacationer swims to a privately owned Greek isle, said to harbor a Gorgon. He finds the owner of the island wearing a mask, which she never removes. He stays with her a while, then grows bold and asks about the mask. The lady removes it, and he sees that her face has been frozen into a Gorgon mask—the result of a fit and nerve damage, she explains. But with that explanation, their conversation ends. He comes to realize that she has contempt for those, like himself, who need not struggle against such a deformity, and he feels himself belittled, petrified, by comparison.³

One would have thought that the Gorgon, so recognizable and unusual an image, would have soon found itself immortalized in an art form that specializes in presenting such memorable creatures. But the Gorgon was kept off the motion picture screen by the very features

that helped to make it a success in popular culture. That crown of snakes, so easy to render in paintings, sketches, and sculpture, defies most efforts to render it in motion. One would have thought that at least this would be an easy thing to animate, but for some reason the Gorgon has not attracted much interest in that quarter. She has, so far as I can tell, appeared on screen only five times.

The first appearance was extremely unorthodox—a Warner Brothers cartoon entitled *Porky's Hero Agency*, released December 4, 1937. The director was Bob Clampett and the animator Charles M. (“Chuck”) Jones. (Porky Pig was the big cartoon star for Warner Brothers at the time, Bugs Bunny arguably having not been invented yet.) In the film, Porky falls asleep while reading a book on mythology and dreams that he is a Greek hero, “Porkykarkus,” who has “nothin’ to do but slay monsters and rescue damsels.” He has wings on his feet, à la Perseus and Mercury, and a schedule of fees for different feats of derring-do.⁴

The emperor sends for Porky and tells him that a Gorgon has been devastating the kingdom, turning his subjects into stone, and he enlists Porky’s aid in getting rid of the menace. He’s able to get a unanimous vote on this action, because his council has been turned entirely to stone. But the emperor has hooked all their arms up to a string so that, by pulling it, he can get them to salute him in unison.

The Gorgon is an old hag who turns people to stone with her magic camera. She also has a magic needle that, injected into one of these stone statues, can return it to life. Her workshop is crowded with examples of her handiwork, among which are the Three Stooges petrified as the Three Wise Monkeys and a fence made out of caricatures of the Warner Brothers animators. When Porky comes upon her she is unsuccessfully trying to petrify a human pyramid of acrobats (they keep petrifying as a real Egyptian pyramid, and she has to depetrifying them with her needle and begin over again). Porky steals the needle and begins restoring statues. Some of the statues were never “real” to begin with, and as a result the Venus de Milo (with Popeye arms) and the Discus Thrower both come to life. Even an arch is given life and stumps away on its two “legs.” But the Gorgon finally catches up with Porky and tries to make him look at her, at which point he awakes to find that his mother is the one trying to get him to open his eyes.

George Pal, a filmmaker originally from Hungary, established himself in the United States with his “Puppetoons” animated features. He moved on to live-action films, specializing in fantasy and science fiction. In the 1950s and 1960s he produced and often directed such films as *The War of the Worlds*, *The Time Machine*, *Destination Moon*, *The Conquest of Space*, and *The Wonderful World of the Brothers Grimm*.

In 1964 he brought Charles Finney's novel to the screen as *The Seven Faces of Doctor Lao*, serving as both producer and director. The film starred Tony Randall as the Doctor (and in several other roles). The screenplay was written by Charles Beaumont, a noted author of fantasy short stories and one of the more prolific writers of scripts for the television series *The Twilight Zone*.

Finney's book doesn't have a plot so much as it has a mood; it is not much more than a series of expositions, and its appeal derives from Finney's odd treatment of these mythological creatures—dropped inexplicably into a modern setting, described in nonmystical terms—and the reaction they get from the townspeople. Doctor Lao is less a protagonist than simply the focus of the story, and his character doesn't develop—it mutates. He alternates with wonderful inconsistency between a stage-comic Chinaman and a professorial lecturer speaking perfect English. The effect is either greatly entertaining or profoundly annoying. In either case, this is not a traditional narrative, and Charles Beaumont labored mightily to whip the unwieldy novel into dramatic form. The effect displeased fans of the book.

Beaumont chose to tell the stories of a select group of people from the book, focusing on the way their encounters with the circus changed their lives. In particular, the spotlight is on villain Arthur O'Connell, who is attempting to buy out the entire town of Abalone because (as only he knows) a railroad is scheduled to go through soon, at which time land values will increase astronomically. O'Connell and his two goons try to squelch the opposition of the new editor of the local paper (John Ericson). In the end, the bad guy sees the error of his ways and 'fesses up, but not before he has numerous encounters with the strange and bizarre.

Finney's well-populated circus has been reduced to six attractions, none of which is seen at the same time as Doctor Lao. The implication is that the Doctor himself is impersonating each of the six: Merlin the magician, Apollonius of Tyana as a blind soothsayer, Pan, the Abominable Snowman, a serpent, and Medusa. The implied identity is helped along by the fact that Randall himself plays the characters of Merlin, Apollonius, Pan, and Medusa. (The serpent is alternately "played" by a puppet snake and by an articulated figure animated by Jim Danforth. Both versions intentionally resemble Arthur O'Connell. Randall reportedly did not want to get into the heavy costume and mask of the Abominable Snowman.) This list differs somewhat from Finney's novel—the blind soothsayer is combined with the (historical, and nonblind) Apollonius of Tyana. Apollonius, who had a reputation as a wonder worker, was apparently thought to be too obscure to modern audiences, so the office of magician that Apollonius filled in

the novel was taken by Merlin, who does not appear in Finney's book. The obscure bear or Russian character has metamorphosed into the Abominable Snowman.

Our interest here, of course, is the Medusa, who is played as a severe-featured woman with a headdress of snakes. Despite Pal's love of animation (and animator Jim Danforth's work in this film), Medusa is played by Randall wearing a headdress of rubber snakes. It helps that the character is seen only in a mirror or in quick cuts, and that the rubber snakes vibrate in a motion that, under such circumstances, looks believable.

As in the book, a woman ducks around the curtain to prove the Gorgon a fake, but instead proves the opposite when she is turned to stone. Unlike her fate in the book, however, she does not remain in that state. Merlin steps in and demonstrates that, despite his poor performance at the magic show, he really is a good magician when he revives the petrified woman. In twentieth-century pop culture, even petrification need not be forever.

The first film to try to tell anything like the story of Perseus and Medusa was the Italian production *Perseo l'Invincibile* (*Perseus the Invincible*), which was released in the United States as *Medusa against the Son of Hercules*. Clearly there is something wrong with Perseus's being called the "son" of his own great-grandson. To anyone at all familiar with the real story of Perseus, this film is filled with the most unbelievable howlers. I am going to take a closer look than one might think the film is worth, and for a good reason, as I hope I will make clear. In the meantime, I will cite (as T. H. White did in his wonderful translation, *The Bestiary*) Alexander Ross's 1652 bestseller, *Arcana Microcosmi*: "And as dutifull Children let us cover the Nakednesse of our Fathers with the Cloke of a favourable Interpretation."

At the opening of the film, the people of Seriphos, which is here presented as an inland city, are being oppressed by the people of the rival city Argos. The Seriphaens have no access to the sea, the only routes being cut off by the mountains, the Swamp Dragon, the Valley of the Medusa, or the Argives. The Argives hope to starve the Seriphaens into surrender. The prince of Seriphos tries to run the blockade on the road, but his men are beaten back. Some fall victim to the Swamp Dragon. Finally, the prince and his followers find themselves in the Valley of the Medusa—realized here as a treelike creature with a single huge, insistently glowing eye—and are turned to stone.

The rulers of Argos, King Croesus(I) and Prince Gallinor, are hated by their own subjects and must rule with an iron hand. Years ago Croesus had secretly killed the reigning king and married the queen,

Danae(!), thereby becoming a combination of Claudius from *Hamlet* and Acrisius from the original myth. At the time, Danae's son Perseus was spirited away and is believed dead. Nevertheless, a prophecy has foretold that Perseus will kill Gallinor.

Through their agents in Seriphos, Croesus and Gallinor have let it be known that they will open the road to the sea if the Seriphaen princess, Andromeda, will consent to marry Gallinor. The prospective bride and groom are officially introduced at a hunting party. Gallinor shoots a deer, but a commoner appears, claiming the shot was his. The commoner is, of course, Perseus, although no one knows it is he, and he is himself unaware of his true birth. Gallinor fights Perseus and defeats him, but he is restrained from killing his opponent by Andromeda, who says that it is not the custom to kill an unarmed man. She proposes that they all return to Seriphos for a proper duel and says she will marry the winner.

During the preliminaries Gallinor shows himself to be evil and stealthy, contrasted with the nobility and generosity of Perseus. Although the fighting at first goes against Perseus, he eventually overcomes Gallinor, but does not slay him. Gallinor recognizes Perseus by a birthmark. Perseus refuses both the hand of Andromeda and any claim to rule Seriphos, insisting that Argos is his country. Nevertheless, Perseus is made captain of the Seriphaen Guard. He offers to escort Gallinor back to Argos and to plead the case of Seriphos there.

As Perseus enters the city of Argos, Queen Danae recognizes her son. Perseus returns Gallinor and asks Croesus to reopen the trade routes to Seriphos. Later, in private, Croesus rebukes Gallinor for showing cowardice in front of Perseus. Gallinor tells Croesus about the birthmark. Perseus, in the meantime, has been summoned by the queen, who dresses his wounds and tells him of his birthright. Gallinor breaks in and tries to shoot Perseus with an arrow, but Danae steps between them and is killed. Perseus escapes through the window.

In the countryside he organizes a band of Argive rebels. They attack the army of Argos, but are defeated and scattered. During the battle they approach too near the swamp, and the monster attacks the men of both armies. Perseus battles the dragon and defeats it underwater, but he is thought to have been killed in the battle.

Seizing the moment, Croesus and Gallinor march on Seriphos. Perseus rallies the remaining Argive forces but realizes that they are too few to challenge Croesus. To augment their numbers, he decides to fight the Medusa. Once the monster is killed, the petrified men who were its victims will return to life and, he hopes, help him defeat the Argives.

Perseus makes his way into the valley and searches out the Medusa. True to the myth, he looks only in his highly polished shield. He doesn't try to decapitate the monster—the treelike monster doesn't really have a neck, and an ax would really be a more appropriate weapon than a sword. Instead, he attacks its great, single, petrifying eye, slashing it open. Ichor pours out, and the monster expires in an untrelke heap. The petrified men awake and join forces with Perseus, and together they defeat the Argives, killing Croesus and Gallinor. Perseus weds Andromeda and becomes king of Argos.

Why do it? Why change the story so completely? Surely the reason is that the story of Perseus, as it has come down to us from Apollodorus, is not appropriate for the modern screen. "God writes lousy theater," said playwright Peter Stone (quoting an unnamed fellow author). He was defending the liberties he'd taken in writing the book for the musical 1776. One might paraphrase the quote as "The gods write lousy theater" in order to extend the realm to that of mythology. None of the classical myths has made its way unaltered to the popular screen.

Consider the events of the Perseus myth: After an exciting start, in which Acrisius tries to prevent the birth of Perseus, then tosses Perseus and Danae into the Mediterranean, there is a lull of several years. Perseus grows up, then, for no good reason, makes a rash vow and is forced to hunt and kill the Gorgon. He gets too much magical help from Hermes, Athena, and the Nymphs. His first real actions are to steal an eye from some virtually blind women, then to decapitate a sleeping female monster. None of this looks very heroic to a modern audience. In fact, it appears downright cowardly. Perseus redeems himself by rescuing a princess from a sea monster, which is a properly heroic thing to do. The treachery of Cepheus and Cassiopeia leaves a bad taste in the mouth, however. Perseus's final triumph comes as the result of an orgy of destruction—he defeats and kills (or petrifies) Ketos (in some versions), Cepheus, Cassiopeia, Phineas, and their followers. Then he does the same to Polydektes and his followers. Finally, Acrisius gets his comeuppance from a misthrown discus. The death of Acrisius brings closure to the myth but doesn't seem to be related very well to the exciting and interesting Graiae, Gorgons, sea monsters, and magic weapons. It looks almost as if it wandered in from another myth.

Faced with such scattershot material and its occasionally unheroic hero, what is a scriptwriter to do? The issue goes beyond the difficulty of weaving a coherent narrative out of many plot strands or of presenting Perseus in a heroic light. The story must also look good on film. Aeschylus and Euripides could get away with having choruses describe the action and actors fill in gaps in the story. But the strength

of the motion picture is its ability to show action, and a good director will show it in an interesting way. Jean-Baptiste Lully rewrote the myth so that his opera could include a series of magical births on stage (such showy stagework being one of the strengths of opera). In the same spirit, director Alberto de Martino brought onto his stage a Gorgon and a sea monster, hiring hydraulic and mechanical expert Carlo Rambaldi to accomplish the task. (Rambaldi would later become known for his work on the 1976 remake of *King Kong* and for providing the mechanical alien head for Ridley Scott's 1979 movie *Alien*.) The plot of the original myth was hopeless, so it was jettisoned and a new story woven out of a few remnants of the old—Perseus and Danae are still there, along with the Gorgon, the sea monster (relegated, however, to a swamp, where it would be easier to work), Acrisius (with his name shortened to Croesus, although that may simply be due to the translators), and Andromeda. A single dramatic situation is needed, so the war between Seriphos and Argos is born, although it requires a drastic rearrangement of geography. The sea monster and Medusa both have a place as menaces to Seriphos, and the promise of revivifying the petrified men gives Perseus a reason for going after the Gorgon and killing it. The needs of the motion picture medium—like the needs of the Athenian stage, the Greek vase painting, the dramatic poem, and the Paris opera stage—have effected a change in the story. Those needs, it's true, could probably have been met without doing so much violence to the plot of the myth. It's a little surprising that Italian moviegoers tolerated such heavy tampering.

Much of the supernatural element has also been deleted. The monsters themselves, the petrifying eye of the Gorgon, the prediction that Perseus would be the death of Croesus—these are extraordinary and wondrous elements. But the gods are absent from the story, as are the Graiae. Perseus is not declared to be the son of Zeus; there is no miraculous shower of gold leading to his conception; he and Danae are not cast adrift in a chest. Perseus receives no gifts from Athena or Hermes, and he kills the Medusa without anyone guiding his hand. He's a secular humanist mythological hero.

Considering all that, it's a wonder the filmmakers bothered to retain the names Perseus, Medusa, etc. The American distributors even twisted mythology to make Perseus the son of his own grandson, Hercules.⁵ Considering how little of the core story remains, why not simply toss out the names of Perseus and Medusa and simply call the movie *Maciste against the Tree Monster*? That would have made as much sense.

I think the reason for the lack of even more tampering is that public knowledge of the myth of Perseus is too well entrenched. Thus

the film's story, despite its many changes, remained essentially the story of Perseus and would have been recognized as such. It is a little scary to realize that this effort was the closest the screen had come to portraying the myth of Perseus. Still, the movie does illustrate my point about how the requirements and limitations of a medium profoundly affect the story it tells. The need to reshape the story to make Perseus a real hero and to bring a more traditional motion-picture narrative structure to the plot, along with the need to adapt the story to the limitations of contemporary special effects, were responsible for *Medusa against the Son of Hercules*.

The next attempt to bring the Gorgon to the screen abandoned the traditional myth entirely and tried to tell a new story. Hammer Films had found success by remaking horror films for a new generation of moviegoers. Unlike their predecessors of the 1930s and 1940s, these movies featured color, fast-paced action, and sex appeal in the form of décolletage. Having remade *Frankenstein*, *Dracula*, *The Phantom of the Opera*, and *The Mummy*, then performing several variations on the themes, Hammer Films was looking for new creatures to feature. One result was the 1964 film *The Gorgon*, with a screenplay by John Gilling, from a story by J. Llewellyn Devine. Terence Fisher, experienced at Hammer's horror line, directed.

The story is set in a Bavarian Ruritania called Vandorf, rather than in Greece. People begin turning into stone after glimpsing something in the abandoned Castle Borski. The petrification in this case is gradual instead of instantaneous, so the victims are able to make it back to town before they are completely immobilized, and people begin to wonder. Peter Cushing plays Dr. Namaroff, who tries to perform autopsies on the fresh statues, aided by nurse Carla Hoffman (Barbara Shelley). Christopher Lee plays Professor Meister of Leipzig, who arrives to try to solve the mystery of his son's death. (The son's fiancée had been lithified, and the son, suspected of somehow being responsible for this, hanged himself.) The local authorities resent the intrusion. Eventually, it is learned that a local legend tells of three Gorgons named Medusa, Tisiphone, and Megaera.⁶ The first two had been killed, but Megaera is still at large, having fled, for some reason, to Vandorf.

It develops that the spirit of Megaera has inhabited the body of Carla Hoffman, causing her to turn into a full-blown Gorgon during nights of the full moon—another case of the twentieth-century phenomenon of the were-Gorgon, and the closest it comes to the Hollywood version of the werewolf. Hoffman is unaware of her transformations, but Dr. Namaroff knows and has been covering up for her. In the climactic scene at Castle Borski, Dr. Namaroff is petrified, and Dr. Meister decapitates the Gorgon with a conveniently handy

sword before she can affect anyone else. The decapitated head reverts to that of Carla Hoffman.

The movie is a mess. It has atmosphere, but little logic. It's never clear why people are doing the things they do, and there is little substance or point to the plot. The attempt to switch locales from Greece to Germany doesn't really work. Charles Finney was able to pull off the trick of placing the Gorgon outside her country of origin, but Hammer seems to have moved the myth to the familiar stomping grounds of Frankenstein for no good reason. Carla Hoffman is surely the most victimized screen Gorgon ever. Actress Shelley has stated that she thought the Gorgon should have been performed by an actress wearing a headdress of real snakes, and that she would have been willing to do that. Had this been done, she said, the film would have been far more effective. As it was, the Gorgon was costumed using rubber snakes, which proved far less effective than those in *The Seven Faces of Doctor Lao*. Barbara Shelley did not even play the Gorgon, a role that was filled by a woman with the unbelievable name of Prudence Hyman. In the end, it's hard to believe that using real snakes would have saved this film. It would have been more interesting to watch, but the script really doesn't give the actors much to work with.

The Gorgon films of the 1970s are very obscure. This is surprising, considering the caliber of artists who worked on them. Harry Kumel's 1972 film *Malpertuis*, for instance, starred Orson Welles as the dying Cassavius, who has trapped some Greek gods in the modern day by imprisoning them in human skins. Susan Hampshire plays a Gorgon who turns into stone a sailor (Mathieu Carriere) who has fallen in love with her. The Belgian/French/German film had a very limited release.

The next film was made in the style of Disney's 1940 film *Fantasia*; it had no spoken dialogue, but featured animated stories set to music. Instead of the classical pieces used in the Disney film, however, Takashi's *Metamorphoses* (1978) used works by Joan Baez, the Pointer Sisters, the Rolling Stones, and other contemporary artists. As the movie's title implies, the stories were drawn from Ovid's poem—a prologue, followed by the stories of Actaeon, Mercury and Herse, Perseus and Medusa, and Orpheus and Eurydice. A fifth segment telling the story of Echo and Narcissus was excised from the film's final cut. The animation staff featured many artists who had worked on some of the classic Disney animated films from the forties, including *Fantasia*—among them Nino Carbe, Ray Patterson, Robert Carlson, and Edwin Aardal. Several other Disney animators were involved, as well as contemporary comic artists like Mike Ploog. Many of the preproduction sketches and animation samples are beautiful.

So why haven't you heard of this movie? Today it is even more

obscure than *Malpertuis*. Unlike that film, though, *Metamorphoses* remains unavailable on videotape and is not even listed in such compendia of obscure films as Michael Weldon's *Psychotronic Encyclopedia of Film*. (It has been released once on videotape, but as of this writing it is not "in print" anywhere.) The film was in release for only about a week before it closed. It was never reviewed in any major newspapers or national magazines. Despite its artistic pedigree, it did not live up to its potential—the songs are second-rate, the sound quality poor, and the animation frequently falls to the poor level of jerky made-for-TV cartoons. Because the story lines were not very clear, voice-over narration by Peter Ustinov was added, and the result is not very satisfying. The fatal flaw was probably the use of two extremely cute child characters—one male, one female—as the leads in all four segments. With their huge heads and huge eyes, these tykes may have been acceptable in Japan, but Americans found them too cloying. Perhaps now, with the growing interest in Japanese Anime, the film would do better if re-released.

The Perseus segment is drawn from Ovid, of course, but with some changes. Perseus is sent by his king to get the head of Medusa. He helps an old man, who turns out to be Mercury, who gives him the winged sandals and the helmet of invisibility. He helps an old woman, who is revealed as Minerva, who gives him a shield. He steals the eye of the three Graiae (not two, as in Ovid) and learns the way to the island of the Gorgons. He finds the three sisters, who appear to be beautiful, until they see Perseus. They then turn into Gorgons (were-Gorgons again). Perseus avoids looking at them by making use of the mirrorlike shield and cuts off the head of Medusa. Pegasus (but not Chrysaor) is born of her blood.

Malpertuis and *Metamorphoses* may have been the victims of poor distribution, but even with better distribution efforts, *The Gorgon* and *Medusa against the Son of Hercules* were not well-known films. Of those listed above, only *The Seven Faces of Doctor Lao* made any kind of impression on the public consciousness. The next film to take on the Medusa story, however, was heavily backed and promoted and featured many big-name stars. I suspect that most people today who are aware of the story of Perseus and Medusa owe their knowledge to the 1981 film *Clash of the Titans*. Although competently directed by Desmond Davis and written by Beverley Cross, *Clash of the Titans* is first and foremost a Ray Harryhausen film. Harryhausen is neither an actor nor a producer, but the director of special effects. To a large degree, he is the special effects. Harryhausen is the leading dimensional animator alive today.

Dimensional animation is the process of bringing a character to life on screen by constructing an elaborate model with a flexible internal

armature, then placing this on a miniature stage and moving it by increments from frame to frame. This is a far different and far more demanding process than “eel” animation or the more recent computer animation, because the work is placed almost entirely in the hands of one worker, who virtually cannot stop during the production of each scene. In order for the motion to appear as natural and fluid as possible, the animator must remember not only the direction in which each joint is moving, but also its acceleration. The process is daunting enough with a human figure, with its arms, legs, hands, fingers, head, and torso. It is much more complex when the figure is the Hydra from *Jason and the Argonauts*, with its seven heads on snakelike necks and its two tails. (Harryhausen and Cross fused the monster fought by Hercules with the dragon who guarded the Golden Fleece to create a more visually interesting foe.)

Critics have dismissed this sort of animation as “kitsch,” but I note that Harryhausen often brings to life figures very similar to those in the Greek vase paintings. I think of it more as a modern analogue to the Japanese art of Bunraku, that intricate puppetry form wherein several puppeteers, clad in black, manipulate elaborate puppets to tell traditional stories. The black suits are, like the helmet of Hades, supposed to confer invisibility.⁷ In the case of dimensional animation, the process of photographing the model provides its own sort of invisibility. Harryhausen’s models are puppets without visible strings, and Harryhausen the truly unseen puppeteer. Veteran viewers can identify his work by the very way the characters move.

My brief description above does not convey the range of effects used to bring Harryhausen’s animated creations onstage and have them interact with human actors. An entire repertoire of techniques is used, including mattes, rear projection, and miniaturized rear projection. Artistic distractions and misdirections are also employed to direct the viewer’s eye where the animator wants it. The scenes are carefully crafted.

Harryhausen has always sought, understandably, to create situations that require his brand of animation and to use visually interesting figures. Often the script for one of his pictures has been written after the storyboards showing the figures and effects were already drawn. It’s not surprising, then, that in *Clash of the Titans* some liberties were taken with the story. As had happened before, Perseus was mounted on Pegasus rather than traveling via the flying slippers, since a winged horse is far more visually interesting than funny shoes. A two-headed (rather than three-headed) Cerberus guards the island of Medusa. In place of the very human suitor Phineus to oppose Perseus for the hand of Andromeda, there is the monstrously deformed Calibos(!), who has a giant vulture as one of his

servants. The sea monster, here called the Kraken(!), and Medusa herself are imagined as very different creatures from any previous representations, ancient or modern.

Nevertheless, the essential story sticks closer to its sources than any other interpretation. Screenwriter Beverley Cross was an Oxford scholar in history before he worked as an assistant to David Lean and Robert Bolt on the epic film *Lawrence of Arabia*. He went on to co-write Harryhausen's 1963 film *Jason and the Argonauts*, then wrote several more screenplays for Harryhausen and for Columbia Studios. He claimed to have been inspired to write *Perseus and the Gorgon's Head* (the original title on the *Titans* screenplay) in 1969 while living on the Greek island of Skiathos, which he said "was very close to Seriphos" (it isn't).

Cross did far less violence to the myth of Perseus than had Mario Guerra and Luciano Martino in *Medusa against the Son of Hercules*. Many of the changes involve only names. The fantastic element has also been strengthened, generally with an eye toward creating an impressive photographic shot.

The film begins with Acrisius and his soldiers sealing Danae and the infant Perseus into the chest and tossing them into the sea. The act is witnessed by Hermes in the form of a seagull. Hermes flies to Olympus, where he reports what he has seen to the assembled gods—Zeus (Laurence Olivier, in one of his last roles), Thetis (Maggie Smith, the wife of screenwriter Cross), Hera (Claire Bloom), Aphrodite (Ursula Andress), and Athena (Susan Fleetwod). Zeus is outraged and orders Poseidon to release the last of the Titans, the Kraken, to destroy Acrisius and the entire city of Argos, which assented to the crime. Poseidon duly frees the beast from its underwater cage, and the monster (which looks like a four-armed, lithe sea ape with a fish's tail) sends a tidal wave that engulfs and destroys Argos. Zeus crushes a small terra-cotta statue of Acrisius, and the real Acrisius crumples and dies along with his city.

This minor rearrangement of the myth serves several dramatic purposes. Acrisius gets his comeuppance immediately, bringing a sense of closure to the misdeed that seems too long postponed in Apollodorus's version. It sets the stage for the threatened destruction of Cepheus's city, Joppa, by showing what fate awaits it. And it gives us a glimpse of the sea monster and Harryhausen's excellent effects in the destruction of the city. At the same time, it shows active involvement by the gods (in contrast to the other Perseus film), especially Zeus.

On the other hand, the intermixing of mythologies is already evident. The name of the sea monster Ketos/Cetus has been changed

to the Kraken, a term that Cross found in Alfred Lord Tennyson's poem "The Kraken Wakes." The Kraken, often described as a creature from Norse mythology, is actually much more modern than that—it was first mentioned by the Swedish archbishop Olaus Magnus (whom we met in [Chapter 5](#)) in the sixteenth century. In 1802 Denys de Montford pictured it as a giant octopus or squid that attacked ships, which is how the Kraken is usually interpreted. (Harryhausen had already brought such a giant octopus to the screen in his 1955 film *It Came from Beneath the Sea*.) Ketos was not a Titan, nor was Medusa (as Cross's script later describes her); the Titans were the children of Uranus and Gaia (Mother Earth and Father Sky), who were also the parents of the Olympian gods. I suspect that Ketos/Kraken and Medusa were made Titans by courtesy so that the movie could be titled *Clash of the Titans*, which has more panache than *Perseus and the Gorgon's Head*.

While all the destruction is going on in Argos, the chest containing Perseus and Danae drifts ashore at Seriphos. The two land safely, and Perseus grows up on the island under circumstances that are glossed over. Polydektes and Diktys are absent in this version, and no one lusts after Danae. Instead, after a few scenes that show Danae mothering Perseus, she disappears from the picture. Zeus approvingly watches Perseus grow to young manhood (when he is played by Harry Hamlin) and neatly shelves the terra-cotta figure of him. Thetis asks about her son, Calibos. Zeus replies that Calibos must be punished, since he has proven himself destructive. He has killed all of the race of winged horses except Pegasus(!) and has otherwise disgraced himself. Zeus takes down Calibos's terra-cotta figure and metamorphoses it into a horned, pan-footed, tailed figure. (Calibos seems to be the character of Phineas—from the version of the story told by Apollodorus—turned grotesque, because, before this transformation, he was Andromeda's suitor. The name is obviously inspired by another non-Greek source, Shakespeare's *The Tempest*, in which Caliban is the monster/native of Prospero's island.)⁸ Calibos retires to a swamp, along with a gang of henchmen.

Thetis, angry that her son should be treated this way while Zeus's son Perseus is exalted, wants to take revenge but is stymied by Zeus's protection of the boy. The worst she can do is to transport him magically to the Phoenician city of Joppa in his sleep, thereby advancing the plot. Thetis's major role as a goddess in this film is quite out of line with her position in mythology. Here she seems more important than Hera, Aphrodite, or Athena. You need only look at her role in *The Iliad* to see the glaring differences. Cross's purpose in making her so powerful becomes clear later on.

Perseus is awakened by an imposing masked figure asking who he

is. Perseus replies that he does not even know *where* he is. At this, the theatrical figure whips off its clay mask and is revealed as Ammon (Burgess Meredith), a playwright and actor. Ammon seems to have been inspired by the fifth-century B.C.E. poet Simonides—he admits to having written (like Simonides) a poem about Perseus and Danae being cast adrift. He also serves as a voice for explaining the plot of the myth. (I suspect that there's a lot of Beverley Cross in Ammon.) Ammon takes in the displaced and disoriented youth.

Zeus, learning of Thetis's action, demands that Perseus be given proper weapons. At his command, Perseus is furnished with a magical sword, the helmet of invisibility, and a highly polished shield (which, the voice of Zeus informs him, will one day save his life). Perseus takes the gifts and sets off for the city of Joppa, which is a huge city of gleaming white marble, decorated with Babylonian man-bulls. Despite the lively trade conducted in the marketplace, the city is under a curse. Calibos is the source of it all. Since he cannot wed the princess Andromeda, he has declared that no one will until a prospective suitor can answer a riddle that he has given Andromeda. The riddle changes with each suitor, and anyone who fails to answer correctly is immolated.

Perseus uses his helmet of invisibility to enter the princess's chamber at night and sees her spirit being carried away in a cage by Calibos's pet vulture. Realizing that he needs the ability to fly in order to follow, Perseus consults with Ammon, who suggests that they capture and tame Pegasus. They go to the spring where Pegasus drinks. They are not aided, as Bellerophon was, by a magic bridle from Athena. Instead, Perseus slips on the helmet of invisibility and uses a very non-Greek lasso to capture the flying horse and to tame it.

The next night he follows the vulture on Pegasus, eventually coming to Calibos's swamp. Andromeda has been brought there to learn a new riddle. Calibos (played, in close-up shots, by Neil McCarthy under very heavy makeup) asks Andromeda once again to remember him as he was and to marry him. Andromeda, in turn, asks Calibos to lift the curse from the city. He refuses and gives her the new riddle. As she leaves, Calibos notices Perseus's footprints and follows him. When Perseus takes off his helmet, Calibos attacks. Perseus loses the helmet in the swamp, and the struggle continues.

The next day Perseus shows up at the royal palace of Cepheus and Cassiopeia and offers to solve the riddle. He succeeds, of course, answering that the riddle is a poetic description of the ring of Calibos, and throws the severed hand of Calibos, still bearing the ring, at their feet. He has let the monster live in exchange for lifting the curse.

While the city rejoices, Calibos asks his mother Thetis to grant him

revenge. Their chance comes the next day when, announcing the wedding of Perseus and Andromeda, Cassiopeia says that her daughter is more beautiful than Thetis. Thetis is angered, and the head falls from her colossal statue. The eyes open, and the goddess announces that because of this immoderate statement, the princess must be sacrificed to the Kraken within thirty days, or else Joppa will be destroyed, like Argos.

This is the reason that Thetis has been made much more important than she ought to be: her anger and sentence of death on Andromeda provides the real dynamic for the story. “In the original myths everything happens without character motivation,” explained Cross in an interview. “You’ll see Perseus flying over Joppa and suddenly he sees this girl chained to a rock. All I’ve done is make him go get the Gorgon’s head because he knows she is going to be chained to the rock.”

There is no question, in this version, of Perseus killing the monster with rocks or his sword. He despairs until Ammon, again, suggests a course of action. The Stygian witches might know how to defeat the Kraken. The two men, accompanied by Andromeda, begin their journey to find the witches. (In this movie alone, Andromeda escapes the narrow limitations of a stereotypical damsel in distress. As written by Cross and played by Judi Bowker, she is a strong-willed and independent woman.) Along the way they encounter an odd, mechanical bird. Zeus has ordered Athena to give Perseus her owl, Bubo, as a gift to replace the lost helmet of invisibility. Athena refuses, substituting a mechanical owl constructed by Hephaestus. The mechanical Bubo is one of the disappointing elements of this film. Obviously inspired by *Star Wars*’ R2-D2 (the owl “speaks” in hoots and whistles that only Perseus can understand), it looks more than a little silly. In fact, it makes *Clash of the Titans* difficult to watch.

The party moves on to the cave of the witches. These are, of course, the Graiae. Their appearance in this film seems to be derived from Roman Polansky’s interpretation of *Macbeth*. As in that film, the three gather around a bubbling cauldron containing human parts (one of which tries to escape). The eyes of the actresses are obscured by latex appliances (as with the eldest witch in Polansky’s film). They see by holding up the Eye—a crystal ball—to their foreheads. They try to lure Perseus into their lair, hoping to add him to the brew, but Bubo flies in and steals the Eye, which Perseus then offers to return in exchange for information about how to destroy the Kraken. The witches tell him he must obtain the head of the Gorgon, with which he can petrify the Kraken. Perseus tosses the Eye back into the cave (not into Lake Tritonis), and escapes.

Perseus and his men push on. Andromeda returns to Joppa,

dutifully insisting on being sacrificed, if need be, to protect the city. Perseus and his companions come to the River Styx and hail the boatman, Charon, a (nonanimated) skeleton in a cloak, who poles the boat over to the Island of the Dead, where Medusa lives. Once there, they find the temple surrounded by weathered statues, the remains of those who have already tried to kill Medusa. Also guarding the place is a two-headed dog, who is quickly dispatched.

Inside the temple-home of Medusa, the atmosphere is dark, lit by low fires. The columns are painted in dark, zigzag lines. Medusa is an interesting creation who resembles her representations in art but also possesses original features. She has the by-now characteristic head covered with snakes, which for once are coiling and writhing in proper Gorgon fashion. Her face is that of a woman, but covered with snakelike, scaly skin. She scowls, but her tongue does not protrude, nor does she have fangs. The scaly skin continues down her body. Below the waist she has the body of an immense snake, like that of Cecrops, but terminating in the coils of an American rattlesnake. The general look is a modification of the snake-woman harem dancer from Harryhausen's 1959 film *The Seventh Voyage of Sinbad*. The best touch, however, is that Medusa is made to seem menacing aside from her petrifying glance. She carries a bow and has a quiver slung over her shoulder, and she is no mean archer. So Perseus and his companions cannot simply turn around and approach her by looking in their shields.

The result is a moody and interesting sequence, in which Perseus and his companions dodge around pillars and petrified men as they attempt to get the drop on Medusa, who is hunting them with arrows knocked on the bow. (There are no other Gorgons. As in Ovid's version of the tale, Medusa is a mortal woman who has been turned into a monster by a jealous Athena.) One by one the companions slip and are lithified. Perseus uses the shield to save himself, as legend says (and as Zeus had foretold), but in an odd way—he throws it into the hands of a statue. Medusa sees the reflection of Perseus and rushes toward it, while the real Perseus waits behind a pillar. As soon as she passes, he slices off her head with his sword. Jellylike blood pours out on the ground. It does not produce Pegasus and Chrysaor, but it does dissolve his shield. Perseus carefully grasps the head (without looking at it, of course) and ties it up in his cloak, which serves as a kibisis.

There are still more hurdles to overcome. Calibos has kidnapped Pegasus. He comes to Perseus's camp by night, attacks his men, and stabs the cloak-bag containing the head. The blood of the Gorgon seeps out and is transformed into giant scorpions. Perseus and his remaining companions fight off the arachnids and kill Calibos. Bubo contrives the escape of Pegasus. They unite in time to get Perseus to

Joppa just as the Kraken is descending upon the enchained Andromeda. The head is displayed to the Kraken, who is frozen in stone, then crumbles into the harbor. At the conclusion of the movie, it is related that the principal figures are immortalized as constellations.

Clash of the Titans was to have been Harryhausen's biggest feature, the start of an amplified career. It was, instead, apparently his last film. For more than fifteen years now there has been no new Harryhausen production, the longest hiatus since he began making movies in the late 1940s. Time and economics and advancing technology have caught up with his art. Today, instead of staking everything on an essentially one-man operation, in which a momentary loss of attention can ruin an expensive scene, filmmakers use a battery of technicians to create computer-animated special effects. Mistakes can be erased. There is no need for one-time-only work involving armatures or sodium-backing shots. It is, I suppose, only a matter of time before someone will make a movie in which the Gorgon is created via computer animation, but it won't have the soul of Harryhausen's Medusa.

Clash of the Titans was the last gasp of the Gorgon on film, though not if we also include creations inspired by the Gorgon. I have in mind the 1987 film *Predator*, directed by John McTiernan, written by Jim and John Thomas, and starring Arnold Schwarzenegger (backed up by professional wrestlers). The plot concerns an alien creature that comes to Earth to hunt human prey. It comes upon Schwarzenegger and company (a squad of Special Forces soldiers on a mission in Central America) and begins bagging them one by one, taking the heads(!) as trophies. The Predator wears a helmet of invisibility and carries a shoulder-mounted weapon tied in to an aiming device in the eyes of the helmet; for practical purposes, it kills just by looking at its victim. Add to these Medusan touches the dreadlocked hair and two mean pairs of fangs and a reptilian hide and you have an updated version of the Gorgon. I do not know if the director or writers of the film—or Stan Winston's creature shop, which created the Predator—had the Greek myth in mind when they developed this creature, but if they did not, the coincidence is uncanny.

If the Predator was consciously based on the Gorgon, it would not be the first time a modern monster had been erected upon that same framework. A number of horror writer H. P. Lovecraft's odd beings have their roots in Greek mythology. Lovecraft simply added extravagantly to the descriptions, making his creatures seem much more loathsome than their original antecedents. Consider, for example, the description of the Elder God, Cthulhu (from the 1928 story "The Call of Cthulhu"):

It seemed to be a sort of monster, or symbol representing a monster, of a form which only a diseased fancy could conceive. If I say that my somewhat extravagant imagination yielded simultaneous pictures of an octopus, a dragon, and a human caricature, I shall not be unfaithful to the spirit of the thing. A pulpy, tentacled head surmounted a grotesque and scaly body with rudimentary wings; but it was the general outline of the whole which made it most shockingly frightful.⁹

Compare this description with that of the Gorgon in “The Shield of Hercules.” “Scaly body” and “rudimentary wings,” indeed! He even works in the modern theory of the octopus.¹⁰

As I’ve noted, there are surprisingly few appearances by the Gorgon in modern literature, even in fantasy novels. Alan Dean Foster wrote a novelization of the screenplay for *Clash of the Titans*. L. Sprague de Camp and Lin Carter worked a Gorgon of sorts into “Black Tears,” a Conan the Barbarian story, but these examples are formulaic.¹¹

A significant characteristic of these modern examples of the Gorgon story is that the role of women in them—especially that of the goddess Athena—is significantly diminished. In the two films that most closely parallel the original myth, Andromeda, as the love interest, is given a large part, and Danae receives some treatment. But there are no other women in *Medusa against the Son of Hercules*. In *Clash of the Titans*, there are goddesses present, it is true, but their roles, aside from the inimical Thetis, are negligible. Aphrodite does nothing, nor does Hera. Athena, who ought to be the prime mover of events, is reduced to a headstrong side interest. The role of divine helper is taken by Zeus, making this myth especially patriarchal. The switch in emphasis cannot be attributed solely to the fact that the producers were able to obtain the services of Laurence Olivier in the part of Zeus, because they also had “name” stars to play Aphrodite and Hera, yet gave them tiny parts. This diminishing of Athena and exaltation of Zeus was a conscious decision. Even in the comic book *The Twilight Zone* (noted above), the recounting of the myth of Medusa eliminates Athena, giving the role of divine helper entirely to Hermes.



11.5 Medusa's sisters make an appearance in Neil Gaiman's mythologically literate "graphic novel" *Sandman: The Kindly Ones*. Stheno and Euryale don't have food because, being immortal, they do not have to eat. Aegle, Erythia, and Arethusa are the Hesperides (although the name of the third is usually given as "Hespera"). The retrieval of the golden apples from their orchard was one of the twelve labors of Heracles. The *Sandman* is a trademark of DC Comics © 1998. All rights reserved. Used with permission.

The only cases I have found in which the female characters are given important roles are the two fantasy stories “Shambleau” and “The Gorgon,” and I note that both were written by women authors. They illustrate, I believe, the beginning of an important trend in the modern history of the Gorgon—its role as a female symbol. Author Iris Murdoch, for instance, employed Gorgon imagery in her 1961 comedy of manners *A Severed Head*.¹²

Gorgons have been the subjects of poetry since the Renaissance, but in the twentieth century the poets who made use of this image were, more and more often, women. Female artists, too, began to use the Gorgon as a potent symbol. The Gorgon has become the symbol of female rage. One of the first publications to enunciate this principle was *Women: A Journal of Liberation*, in its 1978 issue on women and power. On the cover of this issue is an unorthodox drawing of a Gorgon by Froggi Lupton. Inside, the editors explain that “it [the Gorgon] can be a map to guide us through our terrors, through the depths of our anger into the sources of our power as women.”

Emily Erwin Culpepper brought out many of these associations in her 1983 thesis, *Philosophia in a Feminist Key: Revolt of the Symbols*, and in a 1986 article for *Woman of Power* magazine entitled “Ancient Gorgons: A Face for Contemporary Women’s Rage.” “One thing is very clear,” she writes. “The Amazon Gorgon face is female fury personified. This Gorgon/Medusa image has been rapidly adopted by large numbers of feminists who recognize her as one face of our own rage.”¹³

Edition number 13 of the journal *Re/Search*, entitled *Angry Women*, had a cover featuring a snaky-haired Medusa whose snakes embrace missiles, stealth fighters, telephones, and calculators. The editors explained: “For the cover of this book, and as a minor antidote to the loss of the rich and meaningful mythology in our lives, we resurrect the image of the Medusa, updated with contemporary power icons. Reflective of the systematic destruction of matriarchal history by the patriarchy, the Medusa expresses anger. The complex, powerful pantheon of ancient goddesses such as Medusa, Juno, and Artemis were reduced by their conquerors to narrow, negative, fearsome creatures. Medusa’s rage, embodied by seething snakes that turned men into stone, seems to be an appropriate response to servitude. Anger is an emotion which must be reclaimed and legitimized as Women’s rightful, healthy expression—anger can be a source of power, strength, and clarity as well as a creative force.”¹⁴ They later published a second volume on angry women, also with a Medusa cover.

Medusa also made it onto the cover of Mary Valentis and Anne Devane’s book *Female Rage: Unlocking Its Secrets, Claiming Its Power*

(1994). The Medusa in this case does not look as fearsome—an artistic decision made at the insistence of the publisher, who thought an angry face would not sell very well. This was probably a mistake. The authors, professors of English literature at SUNY-Albany, write: “When we asked women what female rage looked like to them, it was always Medusa, the snaky-haired monster of myth, who came to mind. (Glenn Close in *Fatal Attraction*, Roseanne Barr in *She-Devil*, and Lady Macbeth came in as close seconds.)... In one interview after another we were told that Medusa is ‘the most horrific woman in the world.’... None of the women we interviewed could remember the details of the myth; none of them knew how Medusa came to be the symbol of female darkness and furious anger.”¹⁵

Emily Erwin Culpepper knows well the value of using that anger:

Feminism has shown me ways to break through years of conditioning (mine was the white southern trying to become middle-class variety) to be always pleasant and “nice.” Learning to fight involves exploring your capacity for fierce determination, and its focused expression.... Identifying with Gorgons is not an unreal, escapist romanticizing of female ferocity. Engaged in self-consciously in a realistic way, it is an important survival tool. On November 16th, 1980, I was attacked at my home. About 9:30 at night, while I was working on writing my dissertation, the doorbell rang. Impatient with this interruption, my mind on my work, I looked through the door’s blinds at the young man standing there and asked what he wanted. His words were unclear, something about my neighbor. Thinking he was a friend I had recently seen with my neighbor, still not clearly understanding the mumbled words, I opened the door slightly. Abruptly he pushed forward into the room and started grabbing me. I forcefully knocked him off and shoved him back and out—shouting, feeling my face painfully contort with the force of a fierce and desperate rage.... [An hour later] I let the fearful, alarmed, desperate Rage so recent, still fresh, well up in me in full force. As I felt my face twist again into the fighting frenzy, I turned to the mirror and looked. What I saw in the mirror is a Gorgon, a Medusa, if ever there was one. This face was my own and yet I knew I had seen it before and I knew the name to utter. “Gorgon! Gorgon!” reverberated in my mind. I knew then why the attacker had become so suddenly petrified.¹⁶

In light of this account, it is interesting to note that there is a women’s organization in Utrecht in the Netherlands called MEDUSA. Founded in 1991, it is officially the Landelijk Bureau Ontwikkeling Beleid & Hulpverlening Seksueel Geweld, and its purpose is to prevent the sexual abuse of women, provide referrals to victims in need of

support services, and disseminate information.

Jane Caputi, in *Gossips, Gorgons, and Crones: The Fates of the Earth*, sounds a call to action:

In her earliest depictions, the Gorgon is always fierce, bearded, toothy, and assuredly ugly by *Cockaesthetic* standards.... This original Gorgon face is of one who can vanquish and annihilate those who attempt to violate and victimize her.... Medusa has been symbolically annihilated, shunned, slandered, and categorically defined as ugly and evil. Now, more than ever, we need to repudiate that long-standing lie. Now, more than ever, we need to turn the face of history to her face.¹⁷

Elana Dykewomon's 1976 collection *They Will Know Me by My Teeth* features a drawing of a very archaic-looking Gorgon on the cover (by Laura Kaye). "The cover," notes Culpepper, "is its public face, staring forth from bookstore shelves, fulfilling the ancient Gorgon's function as guardian and promise of the female power within." The book is intended "to be sold and shared with women only" notes Dykewomon. (Almost twenty years later, Dykewomon retired from the editorship of the lesbian journal *Sinister Wisdom*, and the last issue she edited also featured a Gorgon on the cover.) A similar Gorgon face graced a popular feminist button in the 1980s. Culpepper had one pinned to her book bag.

The button contains no words, for it needs no explanation of what it is. This face is self-explanatory. The father of an acquaintance saw this button on the book bag I carry. He had never heard of Gorgons nor seen a picture of one and asked me what it meant. I asked him to tell me first what he thought it meant. Immediately he replied, "It means: Keep Out!"¹⁸

How has the Gorgon achieved such a status in the minds of modern women, even those unfamiliar with mythology? Why not Athena in her guise as the Battle Goddess? Certainly many see the Gorgon as another aspect of Athena, but why shouldn't Athena be seen as a protectress in her own right, helmed for battle, armed with spear and aegis? Wouldn't that be a more rational symbol of female preparedness and willingness to fight? Controlled strength versus uncontrolled rage?

I believe that one reason for the Gorgon's ascendancy is that it still occupies a place in the public consciousness. How many other figures from classical mythology fit the bill of protector? How many Greek

goddesses appear sufficiently fearsome? Hera and Aphrodite and Thetis and so many of the others just look like women in robes. For all their imposing gear, neither Athena nor Artemis looks sufficiently daunting. Other women from Greek mythology are generally victims (Daphne and Io and Iphigenia) or are not well known as monsters. (What does Echidna look like? Or Scylla?) Of all of the possible candidates, only the Gorgon has the savage, threatening appearance to serve as an immediately recognized symbol of rage and a protector of women's secrets. And although the Gorgon is hailed as the symbol of female rage, it is actually more than that—it is the symbol of empowered female rage. The Gorgon doesn't merely threaten; it can carry out its threats. It can turn men into stone. It can frighten off the enemy.

This idea got some help from the theories of Robert Graves. “[The Gorgon's head] is merely an ugly mask assumed by priestesses on ceremonial occasions to frighten away trespassers; at the same time they made hissing noises, which accounts for Medusa's snake locks.” Graves speaks with such conviction that, unless you read closely, you may not notice that he is saying this solely on his own authority. Elsewhere he asserts that “the Gorgon-head is a prophylactic mask, worn by priestesses to scare away the uninitiated.”¹⁹ Despite the lack of evidence, it has become widely accepted that, in the ancient world, the Gorgon mask was the guardian of female secrets.

The feminist interpretation of the Gorgon emphasizes different myths than the ones I have examined in this book. I emphasize the “daughters of Phorkys and Ketos” interpretation because it fits in so well with the astronomical theory in [Chapters 6 and 7](#). Helen Diner, author of *Mothers and Amazons*, on the other hand, cites the “Medusa as Amazon” theory, which fits in well with the idea of the Gorgon as fierce protectress. Z. Budapest (cited in Culpepper by way of M. Womongold) argues that the Gorgons were a tribe of black Amazons, “whose kinky hair caused the Greeks to mock them as having snakes for hair.” The idea seems to have been picked up by Alice Walker, who mentions it in her 1989 novel *The Temple of My Familiar*. Monica Sjoo and Barbara Mor, in *The Great Cosmic Mother: Rediscovering the Religion of the Earth*, offer a very detailed image of these Moroccan Amazons. They worshiped the goddess Anatha (related to the Egyptian goddess Neith and the Greek Athena), who wore a goatskin chastity tunic, the original of the aegis. She also carried a leather pouch containing a sacred serpent and her protective Gorgon mask. It is likely, Sjoo and Mor argue, that all the Amazons wore these chastity belts, and that any man who removed them without the owner's consent could be killed.

This is an extraordinarily detailed picture to be drawn from a few

thin strands of tradition. At the risk of appearing insensitive, I have to say that I cannot accept it. Anatha was a Hittite goddess, and the relationship between Anatha, Neith, and Athena is obscure at best. Where the sacred serpent in the pouch comes from I do not know. The Gorgon mask seems to be from Graves's theorizing, while the entire concept of Gorgons as Amazons (with Medusa as their queen) seems to come from the ancient novelist (and untrustworthy mythographer) Dionysios Skytobrachion, by way of Pausanias and others.

Norma Lorre Goodrich, in *Priestesses*, weaves a web around the idea of an Africa queen Medusa, tying her to goddesses and to historically documented warrior women of Africa. Judy Chicago places Medusa as a warrior queen alongside Antiope, Lampedo, and Penthesilea in her artistic work, *The Dinner Party*. It is a powerful image: the warrior queen vanquished by the patriarchal Greeks, beheaded, then turned into a horrible monster of myth who is only now being accorded the praise and honor she deserves, rescued from centuries of male-imposed scorn. But I find it unbelievable, for the reasons stated above. I don't wish to be misunderstood—I think that the Gorgon as a symbol of empowered female rage is important and useful, and I support such organizations as MEDUSA. But I don't believe that the elaborately imagined myths of African Amazons lie at the heart of the myth of the Gorgon.

Other origin myths for the Gorgon have been put forward. One holds that Medusa was transformed from a beautiful maiden into the monstrous Gorgon by a wrathful Athena because she made love to Poseidon in one of Athena's temples. Others present her as the "dark" side of Athena, as attested by the presence of Medusa's face on the aegis. In either case, proponents of these alternative myths believe that Medusa existed as a goddess figure in Greek prehistory, probably as one face of the Triple Goddess, and that our present myth of Medusa as a monster is the result of patriarchal savaging of this rival deity. Barbara G. Walker expounds this latter view in *The Woman's Encyclopedia of Myths and Secrets*, claiming further that "a female face surrounded by serpent-hair was an ancient, widely recognized symbol of divine female wisdom." Walker has been a significant influence in modern interpretations. I find all these points debatable.

About the most peculiar interpretation I have found is recounted in Elise Boulding's *The Underside of History: A View of Women through Time*, in which the author claims that "Carmenta created a Latin language from the Greek, Medusa gave the alphabet to Hercules, Queen Isis to the Egyptians, (while) the priestess-goddess Kali invented the Sanskrit alphabet." In fact, Thoth is usually accepted as the god who gave hieroglyphics to the Egyptians. As we noted in [Chapter 4](#), Kali only attained importance recently, and no myth that I

know of has her inventing a language. The only interaction between Hercules and Medusa in all of ancient mythology occurs in Apollodorus, who says that Hercules met the spirit of Medusa in Hades. Certainly neither one had anything to do with the alphabet. In a more recent reprinting of Boulding's book, it is clear that she is quoting from Graves's *The White Goddess*, in which he holds that the iconotropic origin of the myth of Perseus and Medusa was the Triple Goddess's gift of the alphabet to Hermes.

"The patriarchal images of women from Graeco-Roman mythology will continue to oppress as they remain 'encoded within our consciousness,'" writes Susan R. Bowers in "Medusa and the Female Gaze." "The task for feminist scholars and teachers is to expose the depth and profundity of these images in the Western psyche and discover how to reconstruct images of women that represent their complexity and power.... Contemporary women artists are turning to this matriarchal image for inspiration and empowerment. These artists demonstrate how the same image that has been used to oppress women can also help to set women free (p. 217)."

Indeed, there has been an explosion of such artwork, mainly in poetry and painting. A recent collection of contemporary Puerto Rican women's stories is entitled *Reclaiming Medusa*. "What power! And who can keep from envying it, despite its fearful consequences?" writes editor Diana Velez. "Why are we always pushed, as readers, into an identification with Perseus, the hero who appropriated Medusa's power?... And what would be Medusa's desire? Probably revenge. And what better way to get it than through writing. Writing, which provides its own revenges and antidotes."²⁰

May Sarton was the first to call upon this new purpose of the Gorgon, in her aptly titled poem "The Muse as Medusa":

I saw you once, Medusa; we were alone.
I looked you straight in the cold eye, cold.
I was not punished, was not turned to stone

—

How to believe the legends I am told?

I came as naked as any little fish,
Prepared to be hooked, gutted, caught;
But I saw you, Medusa, made my wish,
And when I left you I was clothed in
thought—

Being allowed, perhaps, to swim my way

Through the great deep and on the rising
tide,
Flashing wild streams, as free and rich as
they,
Though you had power marshaled on your
side.

The fish escaped to many a magic reef;
The fish explored many a dangerous sea—
The fish, Medusa, did not come to grief,
But swims still in a fluid mystery.

Forget the image: your silence is my ocean,
And even now it teems with life. You chose
To abdicate by total lack of motion,
But did it work, for nothing really froze?

It is all fluid still, that world of feeling
Where thoughts, those fishes, silent, feed
and rove;
And, fluid, it is also full of healing,
For love is healing, even heartless love.

I turn your face around! It is my face.
That frozen rage is what I must explore—
Oh secret, self-enclosed, and ravaged place!
This is the gift I thank Medusa for.²¹

“She realizes, at the end of the poem, that the ‘frozen rage’ Medusa represents is really the necessary concomitant of the world of creative feeling,” notes Karen Elias-Button.²²

Barbara Deeming finds the strength for action in the Gorgon, as voiced in “A Song for Gorgons”:

Gorgons, unruly gorgons,
With eyes that start, with curls that hiss—

Once
I listened to the fathers’ lies,
Took their false advice:
I mustn’t look at you, I’d turn to
Stone.

But now I meet your clear furious stare and
It is my natural self that I become.
Yes, as I dare to name your fury
Mine—
Long asleep,
Writhing awake.

Sisters, sisters—of course they dread us.
Theirs is the kingdom
But it is built upon lies and more lies.
The truth-hissing wide-open-eyed rude
Glare of our faces—
If there were enough of us—
Could show their powers and their glories
To be what they merely are and
Bring their death-dealing kingdom
Down.

This is a song for gorgons—
Whose dreaded glances in fact can bless.
The men who would be gods we turn
Not to stone but to mortal flesh and blood
and bone.
If we could stare them into accepting this,
The world could live at peace.

I sing this song for those with eyes that
start,
With curls that hiss.
Our slandered wrath is our truth, and—
If we honor this—
Can deal not death but healing.

I sing: Our will be done!

I sing: Their kingdom wane!²³

British poet and playwright Michelene Wandor applies a much lighter touch in “Eve Meets Medusa”:

Medusa. Sit down. Take
the weight off your snakes. We have

a lot in common. Snakes, I mean.

Tell me, can you really turn men
to stone with a look? Do you
think, if I had a perm—
maybe not.

Don't you think
Perseus was
a bit of a coward? not even
to look you in the face

you were beautiful when you
were a moon goddess, before
Athene changed your looks
through jealousy

I can't see what's wrong
with making love
in a temple, even
if it was her temple

it's a good mask; you must
feel safe and loving

behind it

you must feel very powerful

tell me, what conditioner do you use?²⁴

“For poets, Medusa is an important archetype of feminine creativity,” writes Annis Pratt in *Dancing with Goddesses: Archetypes, Poetry, and Empowerment*. “Medusa comes for many twentieth-century poets to serve as ‘a metaphor for powers previously hidden and denigrated, collective powers we are finally beginning to reaffirm and claim for ourselves’... The key to psychological survival as well as to poetic maturity is a face-to-face encounter with Medusa’s personal and archetypal meaning. Each poet must complete a painful quest to understand and to forgive Medusa; only by looking into her eyes and understanding what lies beneath them can we enter the healing seas of the unconscious from which rebirth is possible (pp. 40–41).”

So this is where Medusa stands today. The strands of her traditions have left us with Medusa as classical Greek myth (known from books, paintings, and sculpture as some part of our European cultural heritage), with the Gorgon as monster in numerous films, and with Medusa as muse and as symbol of female rage. If I can be forgiven a trite generalization, the difference between the sexes is revealed in the way each looks at Medusa. To girls, she is a symbol of the power of their anger and the source of their inspiration. But to boys, she's just a real cool monster.

12

SYNTHESIS

Now, I must caution you gentlemen to look only in the mirror. Man does not behold the face of the Gorgon and live.

—Dr. Edward Morbius,
in the motion picture *Forbidden Planet*, 1956

I tell you. It does not pay to fool with a medusa. Are there any questions anyone would like to ask? If not, I suggest we go and look at the sphinx.

—Charles G. Finney,
The Circus of Dr. Lao, 1935

IN THIS CHAPTER, I INTEND TO sum up my observations and draw everything together into a tidy package. But here, too, I plan to take the bits that wouldn't fit tidily in that package and lay them out for you, the readers, to see—disordered remnants that I couldn't put elsewhere without disrupting the flow. I also want to mention, briefly, the research philosophy behind this book, which may help explain why I have arrived at different conclusions from everyone else.

Based on the reasoning and inferences laid out in the preceding chapters, we should now be in a position to produce a tentative history of the myth of the Gorgon. I assume that the myth really is a Greek invention, and that the parallels from around the world, including those from the relatively nearby Egypt and Babylon and Crete, are independent creations that had little effect on the Greek figure. I believe that there are no links with earlier goddesses or Gorgon figures from prehistory.

The death's head is the nucleus around which the myth coalesced. The decaying head of someone dead for a period ranging from a few days to one or two weeks shows many of the features that would come to be associated with the Gorgon: bulging eyes, which look like a parody of a stare; grossly protruding tongue; puffy and lined facial skin—all of these features are the result of gases caused by decay bacteria. The separating hair gives the appearance of an odd coiffure, and the skin may draw back from the teeth, revealing the rictus grin. Bloody fluid can leak from the eyes, as was alleged of the Furies.

Bodies that were buried normally and given prompt funeral rites

didn't display these features. But the heads of drowning victims (which have a tendency to separate from the torsos) sometimes might. The heads of executed criminals, placed on public display, would clearly develop the features described above and, in so doing, would invest them with notoriety.

From decaying heads, it is but a small step to masks, such as those found at Tiryns and Sparta. At first the face on these masks was not identified with anything in particular. This lack of specificity allowed multiple myths to develop, with the result that some saw the face as that of Phobos, or Fear, the son of Ares. At Delphi it was seen as Eurynomos, the guardian of Hades.

During approximately the same period, the constellations were being identified with stories. The celestial horse was probably imported from Babylon, that particularly visible rectangle in the late summer sky suggesting some large and imposing beast. Later identification with a winged horse was probably the result of a belief that a horse in the sky would need wings. Nearby was a hero with a curved sword in one hand and something that blinked in the other. Also nearby was another bright red star that slowly dimmed and brightened over the course of a year, like the slow beating of a great heart. Clearly the two varying stars were related. Since the brighter star took only three days to wink out, it was seen as the child of the slower, older one.

Two myths, at least, began to crystallize around the three-day star. One held that it represented the eye that passed among three monstrous sisters. Its disappearance every third day showed when it was stolen by the hero. According to the second myth, the star represented the head of a monster. For two days the star did not dim, so on these days the star represented an "immortal" monster. On the third day, the hero cut off the head and placed it in his kibisis, and the monster was mortal. The three-day period of the star Algol thus gave rise to two sets of triplets, both the daughters of the monster Ketos, with the star Mira as its beating heart.

Once the myth had evolved to include the hero's stealing the eye, it was possible also to have him discard it. This facet fitted in neatly with the Perseid meteor shower, the most spectacular display in the sky, which appeared in the late summer, just when the constellation was at its most visible at the setting of the sun. The combination of the two acts—theft and discarding—was such a success, in fact, that it resulted in the hero's arm being moved from near the sickle-shaped sword to the vicinity of the radiant of the meteor shower. In this way, a pair of relatively dim clusters became the arm of Perseus.

The very name *Perseus* may have been derived from the word for

“cutter,” since the hero cuts off the head of the monster. By extension, a monster with its head cut off must have suggested the death’s head, since the latter was usually represented without a body. Now there existed the beginning of a myth to explain that head: A hero was sent to do it, a hero with a sickle sword who killed one of three sisters, two of whom were immortal. Also drawn into the association was Ketos, the monster with the beating heart, and perhaps the three sisters who shared an eye that was later thrown to earth.

Other myths clustered around the same stars. If one could accept that Algol was a monster’s head, then one could also see a figure with a sword and a horse springing away from it. The myth of the births of Chrysaor and Pegasus from the neck of Medusa was originally a separate story, later incorporated into the broader myth. Perseus was associated with the Perseid shower, which to some suggested a miraculous impregnation of Danae by Zeus in the form of a shower of gold. It was also possible for the same constellations to suggest different heroes, with different stories—Bellerophon and the Chimera instead of Perseus and Ketos, for example, or Hercules and Ketos instead of Perseus and that same sea monster.

The presence of nearby constellations with variable stars (if not such obvious ones as Algol and Mira) suggested other characters—Cassiopeia and Cepheus in the myth of Perseus, along with the benign (and variable starless) Andromeda. Ketos (or Cetus) came to represent a direct threat, besides being the parent of other threatening characters. It was so spectacular that the stories found a way to cross the boundaries of other constellations and even the zodiac to drag it in among those other clustered constellations that made up the main part of the developing myth.

Some elements of the myth were brought in from less celestial sources. Perhaps the idea for the shared eye of the Graiae came, as Lettvin suggests, from the combat of octopodes. The idea of invisibility, suggested by the disappearance of Algol, may have been reinforced by the camouflage ink produced by the squid, and the petrification of the Gorgon’s victim was possibly inspired by the “freezing” of potential prey under the eye of the octopus. The flying sandals may have been suggested by the cuttlefish, but it seems more likely to me that Perseus and the Gorgon were depicted with wings because, like Pegasus, they were found in the sky.

The face of the Gorgon came to be the face on the shield, at first painted, then molded. Because the myth had Perseus beheading the Gorgon with Athena’s help, it was only reasonable that he give the head to Athena to put on her aegis, or her shield, or her breastplate. Or even, illogically, on all of these. With the advent of polished metal shields, the tale of Perseus looking at the Gorgon only in its mirrored

surface (as protection against the monster's direct glare) evolved to explain how the face became "fixed" in the surface.

By this time, we have finally emerged from the preliterate Dark Age of Greece, and we can begin to see the Gorgon being molded by literature. Dramas about Perseus and Andromeda were written, and the staged productions influenced the depiction of these characters on vases, which in turn reinforced changes in the story. Andromeda, unshackled in the earliest versions, came to be chained up. The Gorgons began to get prettier. At first these changes were subtle. The faces began to look more like heads than masks (although perhaps at first they *were* masks, like the great clay heads of Tiryns), then they grew more human, until finally Medusa looked like a sleeping woman, about to be beheaded by the creeping Perseus. The wings that had been attached to her shoulders migrated to her head. As her grosser features—the boar's tusks, the protruding tongue, the rictus grin—disappeared, the snakes that surrounded her were emphasized, until they actually inhabited her hair. Sometimes, especially when the figure was small, the snakes even replaced the hair. But it wasn't until the rebirth of the Gorgon in the Renaissance that we were presented with the Gorgon we are most familiar with today—the wild woman with snakes in place of hair. It is this image that has endured up to the present day.

The story and the image of the Gorgon have grown through time, pushed and prodded by many forces. I have attempted to unravel some of these. There is nothing inevitable about the form taken by the final myth. The best proof of this, I think, is the fact that, although there are many artistic doubles of the Gorgon around the world, none of the myths associated with them duplicates the story of Perseus and the Gorgon. One of the more interesting things about the Indian Kirtimukha, in fact, is that there are three or four different myths about how that remarkable head came to be separated from its body. Not one bears much resemblance to Perseus and Medusa.

Another illustration of the nondeterminacy of myth is the status of that classic image of hell, the Devil. One variation of the Christian Devil, in particular, has become an instantly recognized symbol of the underworld—the version showing him with horns, goat feet, red skin, and pitchfork. When Gary Larson or B. Kliban draw a devil in a subterranean setting, you know they're setting you up for a gag set in hell. But in a slightly different universe, the Gorgon might easily have become this universal symbol for hell.

Think about it. If my theory of the Gorgon head's having been derived from a decaying head is correct, then the Gorgon had a real start on the Devil. What better symbol for the region of the dead than a decaying corpse? This is the monster Persephone threatens to send

up after Odysseus in Book 11 of *The Odyssey*—and the works of Homer were often taken as literal truth by Greek fundamentalists, just as the Bible is considered an unerring guide to the unseen world by religious fundamentalists today. This is the creature Eurynomos depicted on the walls of the Lesche in Delphi. Virgil and Apollodorus put her in hell, as well.

For some reason—it's still not at all clear to me why—interest in the Gorgon as a creature of Hades evaporated over time. She is rarely placed in hell or spoken of as a denizen of the underworld even in classical mythology, either Greek or Roman. The coming of Christianity didn't kill her off, it just sealed her fate. The Gorgon got a second chance when Dante and Milton and the Grub Street playwrights brought her back into public view as a sure sign of hell, but by then the Christians' goat-footed Devil had been permanently ensconced there and was all but impossible to dislodge. Nevertheless, in a world only slightly different from our own, it would be easy to imagine Gary Larson drawing cartoons about a hell inhabited by snake-haired Gorgons rather than pudgy devils.

My own interpretations of the meaning of the Gorgon and the origins of her features differ from the most widely accepted views. Many of the theories I've espoused above are original to me—in particular, the derivation of the Gorgon head from a decaying head, the scarecrow theory of Gorgons and gargoyles, the variable star hypothesis of the myth of Perseus and Andromeda, the linking of the constellation of Perseus with the *harpe*, and many others. I'm happy to be able to put forward so many theories, but at the same time I feel a sense of trepidation. If these theories are any good, why hasn't anyone else proposed them before now? I certainly like my theories. I think I've bolstered them with evidence wherever I could, and I believe they are consistent with the facts and with each other. But, of course, proponents of other theories would likely make exactly the same claims. They would feel as justifiably proud of their ideas as I am of mine. There is no absolute proof of the truth of any one theory, and the best one can do is to present the best case for one's proposal.

That said, I'd like to address a couple of issues concerning the relationship of my theories to those of others. After all, we can't all be right, can we? Is the original inspiration for the Gorgon the octopus, or the lion, or the gorilla, or the vagina dentata, or the imported face of Bes or Humbaba, or the decaying head? Or is it something else entirely? I have tried to explain the elements of the myth as coming from astronomical phenomena and psychological effects. Robert Graves and Joseph Campbell think that the myth of Perseus represents the Hellenes' overrunning of the land and suppressing the shrines of an earlier culture's goddesses. Campbell draws attention to parallels

with other mythologies from around the world, as I do, but he chooses entirely different myths and entirely different parallels. Who's right?

To begin with, I note that Campbell, for one, generally chooses to emphasize different aspects of the Perseus myth. In his book *The Hero with a Thousand Faces*, he concentrates on the inner journey, rather than on the external effects. Campbell often disregards the details of the myth; the obstacles that must be overcome are interesting bits of ephemera, but his concentration is on the broad outlines of the story—the hero's journey, the threshold of adventure, the setting out, and the return home. I, on the other hand, have reversed the emphasis. My arguments strive to explain the details and ignore the broader sweep.

My theories as presented in [Chapters 6](#) through 10 explain a lot about the myth, but not all. If you take away all the elements covered by my own explanations from the myth of Perseus, you are still left with the following unexplained elements:

- The prediction of Acrisius's death at the hands of his grandson
- The sealing of Danae in a chamber
- The miraculous visitation of Danae by a god
- The sealing of Danae and Perseus into a chest, which is tossed into the sea
- Danae and Perseus's being pulled ashore by Diktys
- Polydektes's lust for Danae
- Perseus's rash boast
- Polydektes's sending Perseus on a quest
- Andromeda being set out as a sacrifice
- Perseus's rescue of Andromeda from the monster
- Cepheus and Cassiopeia's turning against Perseus

These are all “classical” mythological motifs. They all came from somewhere else—not from astronomy, forensic medicine, or the psychology of staring. Simply put, then, I do not presume to explain all the elements of the myth.

It's true that I think many of the explanations offered for the myth by others to be flawed. But not all of them. To explain how this can be, I must explain the underlying philosophy of my research. I did not at first realize that I was being guided by this theory, but it became obvious to me, over time, that I was.

Many philosophies underlie the various approaches to cultural anthropology. The one that has made its deepest impression on me is the philosophy championed by Marvin Harris, former professor at

Columbia University. Harris calls it cultural materialism, and he has promoted it through a series of popular books as well as technical works and textbooks. He prefaces his *Cultural Materialism: The Struggle for a Science of Culture* with the following words:

Cultural Materialism is the strategy I have found to be most effective in my attempt to understand the causes of differences and similarities among societies and cultures. It is based on the simple premise that human social life is a response to the practical problems of earthly existence. I hope to show in this book that cultural materialism leads to better scientific theories about the causes of socio-cultural phenomena than any of the rival strategies that are currently available. I do not claim that it is a perfect strategy but merely that it is more effective than the alternatives.¹

Stated in the technical language of anthropology, Harris's strategy assumes this daunting form: "The etic behavioral modes of production and reproduction probabilistically determine the etic behavioral domestic and political economy, which in turn probabilistically determine the behavioral and mental emic superstructures."² This is quite a mouthful and, to the nonspecialist, thoroughly impenetrable. Harris is much more comprehensible in his popular works, where he makes it clear that his main thesis is that people's actions and their belief systems are determined by the physical realities of their existence, rather than the other way around.

An example he cites over and over in his books is the case of the sacred cow of India. The Hindus do not eat beef because their religion forbids them to. Violence has erupted between Hindus and Muslims in India over just this issue, since Muslims are not forbidden to eat beef. It has been argued that those excess cattle wandering through Indian streets might be slaughtered and turned into a useful food source. In the 1960s, in fact, it was proposed that the development of a beef-slaughter industry could help raise many Indian families out of poverty and lead to greater prosperity. And what could be better than to remove animals that served no useful purpose, drained needed supplies, and were public nuisances as well?

Harris's argument was that the cattle were by no means useless—they scavenged on the streets with little need for support, yet they produced much-needed milk. They also supplied draft animals in the form of calves—no mean benefit in a poor country where gasoline-driven tractors are expensive enough in their own right, not even counting the costs of upkeep and fuel. Finally, the cows provided dung. This last item seems odd and even humorous to the relatively

affluent middle-class American, but cattle dung is exceptionally valuable as a slow-burning fuel, as construction raw material, and as fertilizer.

There is a great deal more to Harris's explanation, but in bald terms, his main point is that those scrawny, wandering cows are much more valuable alive and producing their meager output of milk, calves, and dung than they would be dead and constituting an ephemeral meal. A street cow (which is not ownerless) may produce much less milk than a prize American dairy cow, but it requires negligible feed and upkeep, so on a pint-per-cost basis it comes out well ahead.

Harris makes the same sort of argument about the taboo against eating pigs. Jews are forbidden to eat swine, and so are Muslims. The ancient Egyptians would not eat pigs, either, going so far in their avoidance as to feel dirtied even by the shadow of a pig. The ancient Sumerians had a religious rule against the pig as well. But many modern Americans eat pork often. (Harris points out that, during the colonial era and well into the nineteenth century, Americans ate much more pork than beef.) And in Melanesia the eating of pig is a religious duty. Why are Melanesians required to eat pig, while Middle Eastern cultures are constrained to avoid it? Not, presumably, because the pig is a "dirty" animal—chickens are far less discriminating in their choice of food than pigs, yet they are not taboo. Not because of trichinosis or other parasites, either. These are easily killed by sufficient roasting of the meat. In addition, cows are also subject to parasites, and worse (witness the recent outbreak of "mad cow disease" in Britain). And not because of classification schemes based upon cloven hoofs, says Harris. The real reason, he believes, is that raising pigs is economically impractical in the Near East. In that environment, pigs compete with people for food and habitat, whereas cattle and chickens eat grasses and seeds that people cannot digest. Worse, the pig has no value aside from its meat—you can't harness pigs and use them as draft animals, and you can't really get milk (or eggs) from a pig. On top of all this, pigs have a thermal regulation system unsuited to desert life, because they can't sweat. In order to cool off, they wallow in mud (which is better at thermal transfer than water alone). In a hot climate, if they don't wallow they die. If there is no mud available, they will, out of necessity, wallow in their own urine and feces (hence their reputation as "dirty beasts").

Pigs did well enough in the Near East when it was largely forested, since pigs thrive in a forest environment where there is sufficient shade, water, and roots to eat. But the climatic changes that occurred in ancient times, resulting in the "desertification" of the region, made the pig, once a "succulent treat," into a liability. Why eat pig meat

when one can, with greater efficiency, eat the roots oneself while continuing to get meat from cows, chickens, and goats?

This is only a quick outline of the arguments detailed at greater length in Harris's books, but these examples should suffice to give an idea of his method. It is by no means completely accepted. There is still a great deal of controversy about cultural materialism and its application. The theory appeals strongly to me because it suggests a powerful reason driving people's behavior, because it generates testable hypotheses, and because its conclusions have the "ring of truth" to them.

Before I plunge into my own application of these methods, I'd like to note that the interpretations I am about to offer are entirely my own, and not the suggestions of Harris or any other practitioner of the method. Any errors must be laid solely at my door. I should also note that Harris does not claim that this cultural materialist method will explain all human actions and beliefs. A great many human activities are determined and guided by beliefs rather than by results. But when faced with a new and puzzling phenomenon, it is a good place to start, especially if other approaches seem contradictory.

As a prime example of my own use of this approach, consider the interpretations of the Gorgon as octopus/squid and as the head of a decaying corpse. The way in which I arrived at the latter interpretation, and its implications, illustrate the forces that have helped shape the myth.

Originally I did not intend to write an entire book on the Gorgon. Ever since I had read Jerome Lettvin's article linking the Gorgon to the octopus in 1978, I was convinced he had found the underlying truth of the myth, and I intended to write a brief article about that. I was encouraged when I found others who had independently come to the same conclusion—Willy Ley, F. T. Elworthy, the unnamed companion of H. J. Rose, Jacques Schnier, and those named by A. B. Cook. I was intrigued by the encyclopedic work of scholars like Thalia Phyllies Howe, who gathered a great deal of information on the subject, yet did not even mention the cephalopod hypothesis.

Yet the more I read, the more troubled I became, not only with Howe's theories, but with those of Lettvin and company as well. My thoughts crystallized around one of the characteristic features of the Gorgon. Not the snakes. As I have pointed out, snaky hair was not a feature of the Archaic Gorgon, or of its counterparts around the world. Not the staring eyes. As I noted in [Chapter 8](#), there is a visceral human reaction to staring eyes that is shared by most of the animal kingdom.³ Not the mouth full of sharp teeth and fangs—that, too, is an obvious threat, recognized in the animal kingdom as well.

The Gorgon-defining feature that bothered me was the tongue. What was it doing there? Unlike the other Gorgonic features, the tongue does not have an obvious, instantly recognized meaning. No animal signals threats with its tongue. There is no shared fear of the protruding tongue among the people of the world, or among animals. Yet the protruding tongue is one of the salient features of Gorgons and Gorgon parallels.

Howe had this to say about the subject in 1954:

It is clear that some terrible noise was the originating force behind the Gorgon; a guttural, animal-like howl that issued with a great wind from the throat and required a hugely distended mouth, while the tongue, powerless to give coherence, hung down to the jaw.⁴

You can't deny that there is much in what she says. The name of Humbaba seems to be derived from something meaning "howler," and something of the sort seems behind some of the names of the Kirtimukha. At the same time, her argument does not seem quite right. The Gorgon does not have "a hugely distended mouth"—it has a tightly closed mouth. Its teeth are gritted, closing the orifice. If you were going to portray a howling creature, wouldn't you give it a wide-open mouth, crying aloud to the world? Furthermore, the tongue does not hang "down the jaw," "powerless to give coherence." Rather, the tongue is painfully distended, straining outward to its fullest extent. I urge the reader to try this experiment: push your own tongue out of your mouth as far as you can. Use the pictures of Archaic Gorgons in [Chapter 3](#) as models. (Do this in private, if you wish. I don't want my readers thought insane.) Now try to make a sound. You'll find your vocal chords restrained, your windpipe blocked. This is a uniquely bad posture for doing any sort of howling. It's not just that your words would be incoherent—it's almost impossible to form them at all.

You may argue that artistic truth is a thing different from physical reality. If the image conveys the idea of inchoate roaring, then doesn't it fulfill its function, regardless of whether or not it is physically possible? My reply is that it is unlikely that an artist would choose to represent an action in a manner that is physically unlikely and that would occur to a viewer only if mentioned by someone else. I maintain that, to the untutored, the face of the Gorgon certainly does not suggest a roaring face, because its mouth is blocked. But see below.

Lettvin is bothered by that tongue, as well. He notes: "The modern Greek scholars will assure you that this was a sign of fear or terror among the Greeks. But that is a strange sort of assertion; why should a

tongue sticking out appear only on Gorgons and no other creatures?”⁵

Why indeed? Lettvin's theory is that the tongue is, in fact, the siphon of the octopus, “which has much the same mobility as the human tongue and can be pointed in any direction. It is always hanging out, and this is not a sign of fear; it is the hallmark of the cephalopods.” A clever hypothesis, and one that pegs that anatomical feature of the Gorgon to a physical reality. Elworthy felt the same way, pointing out that such Gorgonic features as tongue and fangs appeared on a number of Gorgon parallels, which themselves occurred where cephalopods were well known to the people. Thus the Incan pots and the Maori tikis.

I was satisfied—for a time. But it continued to bother me. Why should people separated from each other by space and by time independently arrive at the same face from a model so far removed as the octopus or squid? Because the truth is that, although the cephalopod may suggest a human head with tongue and fangs, the siphon and the parrotlike bill don't look like tongue and fangs at all. Surely someone would have given us a monster with a parrot beak, or a tubular tongue, or something even more bizarre.

Why, in fact, should so many people have used the octopus or squid as the basis for this symbol in the first place? Perhaps the cephalopod was important to the seagoing Greeks and Maoris, but what about the mainland Chinese, or the Aztecs, living far from the seacoast on a plateau over a mile above sea level? It didn't make sense that a sea creature would inspire their artwork.

The answer, I was sure, had to lie in some shared human characteristic—something common to the human experience that Aztecs, Incas, Mayans, Maoris, Chinese, Indians, Greeks, Egyptians, and others could see and interpret clearly and unambiguously on their own. I tried and discarded several hypotheses before stumbling upon W. E. D. Evans's description of the decaying corpse in an epigraph in Paul Barber's excellent 1988 book, *Vampires, Burial, and Death: Folklore and Reality*. Here it all was—the bloated face, the facial markings, the pop eyes, and the distended tongue. Death is surely one of the great common experiences of humankind, if not the most important. No one could mistake these features, not anywhere on earth, at any period in history. Here, I thought, was surely the model for the Gorgon and its parallels.

And here is where the story really begins, because once that image has become established—established so well that it becomes part of the background of the culture—society can move on and forget the original meaning. Now the symbol can be invested with other meanings. Now it can become a monster fought by Perseus,

independent of its meaning of Death. More to the current point, now it can become associated with inchoate noise. No artist, I still maintain, would create such a symbol *de novo*. But with the symbol already in existence, one can credit it with being a representation of howling. It's unlikely that many disparate people would anthropomorphize an octopus into a Gorgon face, but once the latter was there, it could take on the features of the octopus. No one would create the Gorgon as a symbol of the sun, but once that round face (made so very round originally in imitation of the bloated, gas-swollen corpse) was known, it could be identified with the very round sun and moon, giving us the Gorgon/Apollo figures in Greek art and the face on the Aztec Calendar Stone.

The same goes for the Gorgon parallel of Kali. One explanation holds that the tongue is a symbol of coyness. Yet, aside from Kirtimukha, no other Indian figure has that tongue, and no others use a tongue as a symbol of coyness. It is only after the symbol evolved from a different beginning, by a different route altogether, that such an explanation could be retrofitted to it. The same goes for the more "philosophical" explanation that it represents *rajas* (activity) restrained by *sattva* (spirituality). Such allegorizing is much simpler in retrospect, after the image has already evolved.

My position, then, is that the concrete symbol probably originated first, influenced by obvious (at the time) physical features. Other associations, abstractions, and allegories attached themselves to this initial image over time and contributed to the growth of the myth. Thus the Gorgon can seem to possess the features of octopi, squids, lions, apes, and other things. It can be associated with thunder and lightning, with howling and wind. It can be an allegorical figure. In fact, such identifications are probably inevitable in the life of a symbol that has endured as long as the Gorgon has, especially given that most people throughout its life were unaware of its original meaning and had to come to some understanding of that image, unaided much by literature or philosophy.

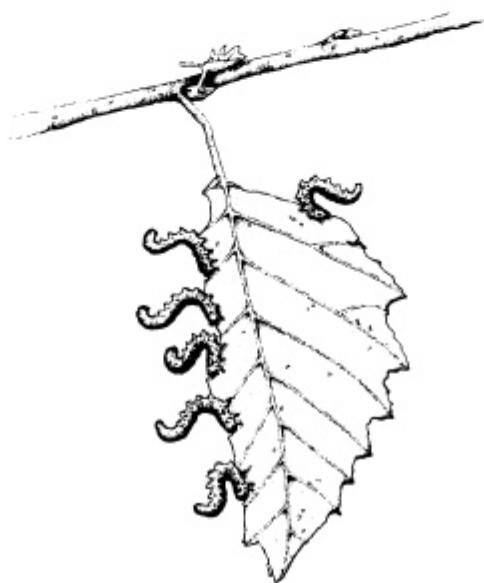
Similarly, other features of the myth of the Gorgon were inspired by physical events, then elaborated upon. So it is, I maintain, with the miraculous birth of Pegasus and Chrysaor from the neck of Medusa. As I stated in [Chapter 7](#), I believe this incident to be derived from the relative positions of the constellation of Perseus proper (interpreted here as Chrysaor, the hero with the golden sword), Algol (representing the head of Medusa), and the constellation of Pegasus. Once this image was created, it could be reported by Hesiod and others, then it could be embellished. Pegasus became the bearer of Zeus's lightning. (Associated, perhaps, with the Perseid meteorites? Meteorites were often lumped together with lightning by the Greeks and others.

Meteors were seen as the physical manifestations of lightning bolts.) Perhaps, as Cook suggests, Chrysaor's sword became linked with lightning as well (again, not too surprising, since the Perseid shower appears to emanate from what came to be his sword hand). Many writers have remarked upon the conjunction of the Gorgon head with an equine body on that Boeotian vase (see [Chapter 3](#)). I think that they place too much emphasis on a single piece of artwork. But I would note that this association becomes easier once Medusa is already affiliated with Pegasus by that stellar proximity.⁶

It's extremely easy to speculate at random about sources for various aspects of the myth of the Gorgon. In this book I've tried to restrict myself to theories that I thought could be corroborated by more than one piece of evidence—the multiple connections between the myth and the stars, the several ways in which Ketos is associated with the myth, the use of Gorgon faces for identical purposes on antefixes, breastplates, and shields around the world, the worldwide appearance of Gorgon parallels. I have considered and discarded a great many speculations simply because I could find no corroboration for them. They were interesting ideas, but they could be “pegged down” at no more than one point and were, for that reason, not compelling. I have included a few of the less improbable of these in an appendix. One I would like to mention here, however, because it potentially explains a very striking image—the snakehaired Gorgon. As I've noted, the archaic Gorgon did *not* have snakes in place of hair. But she was often associated with snakes: the Gorgon on the Corfu pediment has a snake belt, Pindar alludes to the hissing of the Gorgon's snakes, and the monster is sometimes described as having snakes *in* her hair. Sometimes the Gorgoneion is shown fringed with snakes, but they are clearly drawn around the circumference of the head, rather than being attached to the head itself. Generally, one only sees snakes in place of hair in situations where the image is reduced, as on a coin, and it would be hard to show both snakes *and* hair.

That frieze of coiled snakes that appears around the Gorgoneion is very odd. It consists of identical S-shaped snakes arrayed evenly spaced in a circle around the head. It doesn't appear in any other image that I'm aware of. Where does it come from? One interesting possibility suggests itself. The caterpillar that is the larva of the sawfly (*Croesus latitarsus*) is a social insect, congregating on leaves it eats. What is most peculiar is that the caterpillars are capable of acting in unison, as if with one mind. When threatened, the caterpillars (which are located around the periphery of the leaf they are eating) raise their abdomens away from the leaf and wave about in an S-shaped motion. The image they present is uncannily like that frieze around

the Gorgon's head. Is this, then, the origin of the snake border and ultimately, perhaps, the origin of the snaky hair of the Gorgon? Not snakes, but caterpillars. (The sawfly is found in both North America and Europe. Oddly, it is not clear which way it migrated. But related species are to be found on both continents.)



12.1, 12.2 *Gorgon face with frieze of coiled snakes on vase in British Museum, compared with drawing of warning display of sawfly larvae. The caterpillars of the sawfly (Croesus Latitarsus) will, when disturbed, engage in a coordinated warning display in which they curl away from the leaf they are eating. Such a coordinated motion may have suggested the image of the frieze of snakes around the head of Medusa, as shown here. Compare with other illustrations of Gorgoneia with fringes of coiled snakes (see figures 3.8, 3.20, 3.28). The sawfly occurs in Europe and North America. Photograph of the vase courtesy of the British Museum. Drawing of sawfly larva by Leslie C. Costa.*

I have tried minor experiments on the theories suggested in this book. When small birds started to reuse a robin's nest in the corner of my porch, I strapped one of my collection of Daruma dolls next to the nest. I was gratified to find that the birds were frightened away. But they were replaced by a pair of mourning doves, which took no notice of the staring guardian and nurtured its brood until they were old enough to fly away.

I had a T-shirt painted with a Gorgoneion adapted from a plate in the Staatliche Antikensammlungen und Glyptothek in Munich. With its snarling, fanged mouth, outsized, staring eyes, and striking orange color (done in imitation of red-figure colors), I reasoned, it should make an eye-catching design. If people's eyes were drawn to it, it would support my theory about the Gorgoneion on the aegis being a distracting feature. Alas, I didn't notice that people stared at my shirt more than the ordinary. The design did not obviously arrest their gaze. These uncontrolled experiments don't prove anything, of course, but I had hoped for a little more success.

And so here, at last, I grind to a halt. It has been an interesting journey, starting with the Greek legend in its many forms, continuing on through parallels in world mythology. In the course of investigation and explanation, we have taken side trips into history, psychology, zoology, natural history, forensic pathology, astronomy, architecture, art, motion pictures, comic books, feminist theory, and cultural anthropology, among many others. I've recounted a number of theories put forward by others, proposed a great many of my own, and rattled a lot of cages. Many of the theories and ideas I have proposed are new and original, and I've dismissed a number of widely held beliefs, which will undoubtedly cause me trouble. I am convinced of the validity of my own hypotheses, but so, of course, were the promulgators of those theories I've spent much of this book arguing against. I hope, at the very least, that the journey has been thought-provoking, and that I have not committed that cardinal sin (as Oscar Wilde says) of being boring.

APPENDIX

I'D LIKE TO NOTE HERE a few notions I have had that I do not think as well supported as those I have made in the body of the text, or that I could not conveniently fit in elsewhere.

Janus

The Roman god of doorways and passages, and of the New Year (whence the name of the first month, January). He really doesn't have a mythology associated with him. So where does he come from, and what does he mean? I note that a god of doorways might originally have been located over them, just like Kirtimukha in India was placed atop doorways and windows. Janus might be yet another Gorgon parallel, albeit one that has softened into a very human face by the time we first see him. The only representations we have show him as two faces in profile, joined at the back of the head. This is the sort of image you would see in a doorway split up the middle, viewed on edge. This doesn't seem to be a probable route for the creation of an image, but I can't shake it from my mind.

Three Days

"Pagan gods ... were resurrected on the third day," notes G. A. Wells in his book *Did Jesus Exist?* His footnote indicates that he had in mind Adonis and Osiris. Is it possible that the three-day period of Algol inspired this tradition?

Irish Parallels

The Irish hero Finn McCool and his men were once snared by the three Hags of Winter, Camog ("small bag"), Cuilleann ("holly"), and Iornach ("spindle" or "skein of yarn"), before the caves of Keshcorran in County Sligo.

Three phantom sprites came out of the hill. Devilish was the guise of the women. They spell-bound my companions. Three black unsightly mouths, six white eyes never closing, three red bristling heads of hair, six twisting legs under them, three warlike swords, three shields with

their three spears—it was not an easy task to gaze upon the women or their gear.¹

They reduce Finn to “a withered quaking ancient” and do the same to his men. Finn is aided by the goddess Goll and finally cuts off Iornach’s head with his sword.

The similarity to the story of Perseus and the Gorgons is intriguing, but I don’t know how the two stories are related, if at all. Certainly this is the only close parallel I have encountered in all of world mythology. Yet I cannot rule out the possibility that the Greek legend directly inspired this Irish one.

Olmec Mirrors

Among Olmec artifacts are mirrors made of natural magnetite. These mirrors have been ground and polished by hand into concave surfaces, with biconic holes drilled in for supporting cords. The mirrors are very small (about 2 inches in diameter) and date from about 1500 B.C.E. to 300 C.E. Exactly what purpose they serve hasn’t been established. They have been supposed to be devices for starting fires, magnifiers, camerae obscurae, or astronomical devices. Certainly the time and effort put into them suggests that they are something other than simple ornaments.

J. B. Carlson has suggested that they were worn as pectorals by high ranking individuals. If so, I suggest that they were used as distracting devices, just as the Gorgon on the breastplate was. The odd optical effect of a concave mirror, which changed its reflection with each new position in a way unlike a carved or painted decoration, would have been a superlative attention getter.

Names

The names of characters in the myth of Perseus and Medusa, and in many of the parallel myths, are of a very basic sort. Many of them are simply descriptions of the characters. This seems to indicate great antiquity. Perseus may, as I’ve noted, come from *Pterseus* (“cutter”). Danae may mean “woman of the Danaans.” Diktys, the fisherman, has a name that means “net,” which is how he caught the chest with Perseus and Danae. Bellerophon’s name may mean “dart thrower.” If these characters are known only by these names that indicate their functions, it is unlikely that these are new stories about characters known from somewhere else.

Users of the *Harpe*

As I remarked earlier, both Perseus and Hercules were users of the *harpe*, that characteristic curved sword. I noted that I believed their use of this sword derives from the curved shape that appears in what would originally have been seen as the “hand” of the constellation of Perseus. It was only after the Perseid meteorite shower came to be associated with the myth that Perseus’s hand was “moved” up to the double cluster, so he could be seen to be throwing stars. Hercules, I maintained, was also associated with the same constellation and, not surprisingly, had the same sword. Bellerophon is not associated with a sword, but as the “dart thrower” it may not have been expected of him.

This makes me wonder about the other figures of Greek mythology who used the *harpe*. There are few of them. Zeus used it in his fight against Typhon. The myth is recounted in Apollodorus, but is believed to be very much older. Is it possible that in one strand of tradition the constellation now called Perseus represented Zeus? Was the constellation of Cetus seen as Typhon?

Hermes was said to use the *harpe* as well, but the details are less clear. Again, might the constellation have been seen as Hermes elsewhere in Greece?

Hercules fought Cetus, but he is said to have used the *harpe* only against the many-headed Hydra. Is there a tradition in which the constellation of Cetus represents the Hydra?

Kronos used a sickle. The tradition is a very old one, yet one that has, surprisingly, come down to modern times. Kronos with his sickle is the inspiration behind Father Time and *his* scythe, a figure that used to be widespread (Hogarth, among others, used it allegorically) but is today confined to New Year’s Eve celebrations. Is there a possibility that the ancestor of old Father Time shows up in the sky a little early every year?

Finally, there is reason to associate the god Mithras of the Mithraic religion with the constellation of Perseus. Intriguingly, although we know little about the Mithraic religion, we *do* know that the symbol of one of the grades of initiation was the *harpe*. Perhaps Perseus is Mithras, right down to the weapon.

Mania

Another Roman triple goddess was Mania, a set of deities that resembled the Furies in many ways. They, too, may have been inspired by the features of Algol.

Cepheid Meteorites

Another notable meteorite shower is the Cepheid shower. As the name implies, the radiant for this shower (the spot in the sky from which the meteorites appear to emanate) lies within the constellation of Cepheus. In view of the fact that the myth tells us of a war between Perseus and Cepheus, is it possible that the showers of meteorites emanating from the two constellations helped to shape this interpretation? Is this why the constellation of Cepheus came to be associated with the king (rather than the *W* of Cassiopeia, which also had the damning variable star)?

Headgear

Another point of similarity between the cultures around the Pacific rim, in addition to figures with protruding tongues and large eyes, is the use of helmets that look like monstrous heads, with large staring eyes and mouths that apparently engulf the wearer's own head. Examples come from the Americas, China, Southeast Asia, and the Pacific islands. Was this perhaps another use of the distracting face? Just as the face on the shield or on the breastplate could, I maintain, act as a useful distraction, so could one on the head. It recalls the lion-headed skin that Hercules wore.

American Indian Observations of Variable Stars

As I was researching this I learned that someone is working on the possibility that Indians of the American Southwest may have knowledge of variable stars, and that this is preserved in their mythology. Details are not yet available on this work.

NOTES

CHAPTER 1

1. Actually, Superman was anticipated in this respect by another costumed hero from newspaper strips. Lee Falk's *The Phantom* had made its debut a few years earlier, featuring a character who dressed in an incongruous, skin-tight, bright purple suit as he fought evil-doers in a tropical jungle(!). Falk experimented with the appearance of his character, varying it until he had something that "felt right" to him and his readers, so the Phantom's appearance is the result of the same evolutionary pressures felt by Superman. The Phantom has been as successful as Superman—he is still in syndication and has recently been canonized on the cinema screen.

CHAPTER 2

1. This is the story as we have it from Pherekydes, our oldest source. Exactly why Perseus made the brash vow that propelled him into his adventure really isn't entirely clear. The implication seems to be that he said it as a joke, trying to top the extravagant suggestion of a horse as a gift, then was trapped by that seemingly innocent hyperbole. In Pherekydes's account, Perseus *did* ultimately bring a horse to Polydektes, but it was refused.

In Apollodorus's account, though, the emphasis has changed. Polydektes is shown as deliberately plotting against Perseus when he first invites him to the feast, then insists upon a horse. Perseus's retort that he would not stick at bringing the Gorgon's head seems like a cry of humorous exasperation—"Heck, you might as well ask me to bring the Gorgon's Head!" In Apollodorus's version, Perseus does not bring horses to the feast, and this omission enables Polydektes to insist upon the gift that Perseus *did* promise—the impossible Gorgon head.

Apollodorus follows Pherekydes so closely elsewhere that it seems odd for him to depart here. Was he following a different tradition, or was he subtly reshaping the story to make what was a chance inspiration in his source into an evil plot against a poor boy, so that Polydektes's eventual downfall would seem more richly deserved?

2. In "The Shield of Hercules" the bag is said to be silver, with gold tassels, but that probably refers to the colors of the shield itself.

Elsewhere, the author of “The Shield of Hercules” refers to gold grapevines with silver stakes holding them up.

3. Goodrich, *Priestesses*, 179; Henle, *Greek Myths*, 89; Feldman, “Gorgo and the Origins of Fear.”

CHAPTER 4

1. The suggestion was made by Cecelia F. Klein in *The Face of the Earth: Frontality in Mesoamerican Art*, originally presented as her doctoral thesis.

2. Even less likely as either a gorgon ancestor or parallel is Marija Gimbutas’s candidate, a figurine excavated at the Karanova site in modern Hungary. This figure, which Gimbutas claims was a goddess of death, dates from the mid-fifth millennium B.C.E. Again, its provenance is separated from that of the gorgon by time and space, and there are no examples that suggest a link between this sole figure and the Greek gorgons. And again, the points of resemblance between this figure and the gorgon are few, indeed. The eyes are mere slits, the mouth closed, and most other features are only sketchy. The only feature that might identify this as a “gorgon” is what Gimbutas calls a tongue. But this appendage is a most un-tonguelike blob below the mouth. Were it not for the position, one would not dream of identifying it as a tongue.

Gimbutas pointed out another early “gorgon” figure on a pot from the island of Melos in the Aegean. My comments on Cook’s Minoan gorgon apply here, as well. This figure of Gimbutas’s, which shows a frontal representation of a face (although the body is sideways), staring eyes, and a mouth full of sharp teeth, is a much better candidate for a gorgon parallel.

3. “The Shield of Hercules,” ll. 144–48, in Hesiod, *Homeric Hymns and Homeric*.

4. *Ibid.*, ll. 229–37.

5. Homer, *The Iliad*, Bk. 5, l. 738–743.

6. “The Shield of Hercules,” ll. 248–61. Reprinted by permission of the publishers and the Loeb Classical Library.

7. Aeschylus, *The Libation Bearers*, ll. 1048–49, in *Aeschylus I: The Oresteia*. Used with permission of the University of Chicago. All rights reserved. Published 1953.

8. Aeschylus, *The Eumenides*, ll. 48–49, 52–54, in *ibid.* Used with permission of the University of Chicago Press, Chicago, Ill. © 1953 by the University of Chicago. All rights reserved. Published 1953.

9. Virgil, *The Aeneid*, Bk. 7, ll. 443–44, 447–50, 467–69, 475–77

10. Julius Pollux of Naucratis, a second-century C.E. scholar, reported on the masks that a Greek theater company of Euripides' time would have required. He noted that there should be *both* a Gorgon mask and a Fury mask among the property of a well-stocked troupe, so certainly he recognized a difference between them.

11. Theocritus, "The Women at the Adonis Festival," Bk. 15, l. 57, in *Greek Bucolic Poets*, 185.

12. Kinsley, *Sword and the Flute*, 88, 95–96.

13. Campbell, *Mythic Image*, 2:121.

14. A decorative Paiwan house panel from Taiwan, which closely resembles New Zealand carvings and which for many years provided one example of a "stepping stone" from New Zealand to the Americas, is now no longer believed to be an authentic piece. It was first reported in 1961.

CHAPTER 5

1. Plato, "*The Symposium*" and "*The Phaedrus*," 89.

2. Athenaeus, *The Deipnosophists*, 2:498–501 (bk. 5, sees. 220–21).

3. Edward Topsell, *The History of Four-Footed Beasts* (London: E. Cotes, 1658). Cited in White, *The Bestiary*, 266.

4. *Philopatris*, in Lucian, *Lucian*, translated by M. D. MacLeod, Section 9:432–33.

5. I note in passing something that might not be obvious: A lion does not have "cat's eyes." That is, the pupil of a lion's eye does not contract to a vertical slit in bright light, like a house cat's. It contracts to a smaller circle, like a human eye. Thus the huge non-feline eye of the Gorgon is entirely consistent with a leonine origin.

6. A modern supporter of the lunar theory is A. P. H. Scott, who in a 1974 paper stated that the original meaning of the word *gorgon* is "the Moon as it is terrible to behold." His interpretations—that the snakes of Medusa's head derive from the sun's corona (visible behind the shadow of the moon during an eclipse) or from the rippling of the moon's shadow due to the refraction of the earth's atmosphere—seem ingenious but unlikely.

7. Graves, *The White Goddess*, 343, 348.

8. Klaus Thelewit, *Male Fantasies, Volume 1*. Translated by Stephen Conway. (Minneapolis: University of Minnesota Press, 1987), p. 201.

9. The surprising plural of octopus is not *octopi*, second declension, but *octopodes*, irregular third declension, as Dr. Lettvin pointed out to me when I incorrectly used the former in his presence. The alternative is the cacophonous *octopuses*.

10. Actually applied to the Graiae, but the description can be seen as applying to the Gorgons as well if we accept the essential identity of the two sets of triplets.

CHAPTER 6

1. By contrast, the name Sirius is an authentic ancient name for the Dog Star. It appears in the seventh-century B.C.E. *Works and Days* of Hesiod and in “The Shield of Hercules” of about the same date.

2. Hoskin, “Goodricke, Pigott, and the Discovery of Variable Stars.”

3. Ibid. It’s easy to look back on this exchange with a modern knowledge of the situation of Algol and feel a sense of satisfaction that Goodricke finally “got it right.” But such would be “Whig History.” Goodricke’s contemporaries had an excellent reason for doubting that the variation in brightness was caused by an eclipsing companion—the shortness of the eclipsing interval coupled with the short period between eclipses required that the size of the orbit be not much larger than the diameters of the stars themselves. This was thought to be an unlikely, unstable system. They expected that the individual stars ought to be visible. Although the idea was raised several times afterward, as I note above, it wasn’t until Vogel performed his spectroscopic analysis that there was physical proof for the eclipse hypothesis. See Furness, *Introduction to the Study of Variable Stars*.

4. Even the *Journal for the History of Astronomy* gives him little notice. Peter Broughton’s article “The First Predicted Return of Comet Halley” (vol. 16 [1985]: 123–33) devotes only two sentences to Palitsch’s work.

5. Lettvin, “The Gorgon’s Eye,” 82.

6. David Ulansey has suggested to me that this is the origin of the unusual form Zeus took to impregnate Danae, Perseus’s mother. I have since found that others have proposed the same idea. In fact, I was surprised to find that the “golden shower as meteorite shower” connection was first put forward in 1927 by L. Radermacher, although he does not seem to have associated it with the Perseids. A. B. Cook, recounting Radermacher’s theory, noted that it might explain why the chest into which Danae and Perseus are sealed by Acrisius is very often adorned with stars (when it is depicted in vase paintings). “But shooting stars, after all, were a phenomenon familiar enough to the Greeks, and were never confused by them with rain, golden or otherwise” (Cook, *Zeus*, 3:475). I wonder if the association of the golden shower specifically with the Perseid shower, rather than with some more generalized phenomenon, would have made him change his mind.

7. There is another interpretation of the Perseid meteorites in quite another branch of folklore. In England and Germany they were said to be the tears of Saint Lawrence. The feast of Saint Lawrence, a third-century Roman martyr, falls on August 10, near the peak of the display. This fact is often cited as an example of ancient knowledge of the regularity of meteorite displays. In fact, modern science didn't recognize the regular appearance of the Perseid meteorites until the nineteenth century, when they were independently "discovered" by three astronomers, Edward Herrick of Yale University, John Locke of Cincinnati, and Adolphe Quetelet of the Brussels Observatory. The situation parallels that of Algol—three modern observers working independently toward the same conclusion, which was already known in much earlier times and had become embedded in mythology. In this case no one doubts that the phenomenon was known well in advance of the modern discovery—that was attested to in unambiguous language long before Herrick, Locke, or Quetelet began their work. See Littman, "Discovery of the Perseid Meteors."

CHAPTER 7

1. Goold himself examined the astronomical origins of the myth of Perseus at greater length in "Perseus and Andromeda: A Myth from the Skies," in the *Proceedings of the African Classical Association* 2 (1959):10–15. His conclusions differ from those I suggest in this chapter.

2. The variability of Gamma Cassiopeia was suspected a hundred years earlier by W. R. Birt, who voiced his suspicions in the *Monthly Notices of the Royal Astronomical Society* in 1833 and 1859. Birt never followed up his suspicions, however. Nor did anyone else. The matter lay dormant until the flare-up in the twentieth century. See D. L. Edwards, "Changes in 7 Cassiopeiae during the Past 100 Years," *Monthly Notices of the Royal Astronomical Society* 105 (5): 283–291.

3. Algol is the brightest eclipsing variable star visible in the northern skies. By curious coincidence, the second-brightest eclipsing variable star is also in Perseus—it is Gamma Persei, located roughly in the hero's head. But whereas the period of Algol is about three days and shows a dramatic dip, the period of Gamma Persei is about 14.5 years, and the dip of 0.3 in magnitude lasts about ten days altogether. Such a dip is barely visible to the naked eye—even if you know when to look for it. An observer in the ancient world would probably not live long enough to see the star eclipse three times, so it's not surprising that the discovery of the variability of Gamma Persei was so recent—it was not known until 1991. (See *Sky and Telescope* 85, no. 5 [June 1991]: 598–600).

1. Homer, *The Iliad*, translated by Robert Fitzgerald, Anchor/Doubleday (1974) Book 18, lines 487ff; reprinted by permission of Anchor/Doubleday. It is a peculiar thing that according to *The Iliad*, the great authority on matters mythological to the ancient Greeks, it is the shield of *Agamemnon* that carries the Gorgoneion, yet *Agamemnon* is never depicted in art with a Gorgon shield, whereas the shield of *Achilles* commonly is shown with a Gorgoneion. Yet, as we see here, there is no mention in Homer—or anywhere else in ancient literature—of *Achilles* having a Gorgon shield.

2. One system that inevitably caught our attention is a combination target generation system and gaze analyzer built by James Anliker of NASA's Ames Research Center. His Programmed Eye-track Recording System and Eye-coupled Ubiquitous Scene Generator has a somewhat tortured name that gives it the acronym PERSEUS. PERSEUS uses the Cornsweet-Crane system to track the motion of the eye in following computer-generated images. It has an accuracy rating of better than five minutes of arc. Anliker's description of the device draws analogies between it and the myth of Perseus, with the goal of Perseus's quest, the head of Medusa, standing for the ineffable and unutterable Truth that cannot be grasped (seen) directly.

3. Yarbus *Eye Movements and Vision*, 190.

4. Book, *Zeus*, 1:307.

5. "The Shield of Hercules," in Hesiod, *Homeric Poems and Homerica*, 230–33, 236–39.

6. I know of one example that depicts the Shield of Hercules, based on the description. That example, by J. L. Myers, is not satisfactory. There is no good reason to depict Phobos as a griffin, as Myers does, and the other staring faces are reduced to insignificance. See Myers, "Hesiod's 'Shield of Herakles.'" A less ambitious interpretation, which does not have the same faults, is found in Hathaway, *View of Greek Art*, 72.

CHAPTER 9

1. Some examples of books that apply Bernard's words to gargoyles include Sheridan and Ross, *Gargoyles and Grotesques*, and diRenzo, *American Gargoyles*.

2. G. Leland Hunter, "Notes on Gargoyles, Grotesques, and Chimeras," *The Architectural Record* 35 (February 1914):136.

3. A personal anecdote: I have been given a stuffed gargoyle by my sister, who knows of my interest in gargoyles and the like only too

well. (I still have several cans of gargoyle-shaped pasta in my cupboard, also gifts from her.) The idea of a soft, cuddly gargoyle is pretty much an oxymoron, whatever your theory of gargoyles, but it is appealing. I took the beast, with its mock-ferocious glare and mouth full of soft cloth teeth, and shook it face-first at one of our cats. The result was startling. The cat instantly jumped off my wife's lap and went into full-alert defensive mode. Her back curved up to exaggerate her size, the Conquistador-helmet ridge of fur up her spine fully erect. Her tail fuzzed out to three times its normal size and stood away from her body. She gingerly stepped about, always facing the new threat. She continued to display at the innocuous figure for several minutes, no doubt wondering why my wife and I weren't taking any notice of this strange new creature that had suddenly appeared in the supposedly safe sanctuary of our home. Our other cat, approaching from the other side, sniffed briefly at the stuffed figure and walked away. Eventually, I turned the gargoyle around so that its glaring face was away from the first cat and bopped the figure on its head a few times to show its dormancy. Our cat eventually walked up and sniffed the figure, but she still didn't trust it. Don't tell me such figures can't fool mice.

4. There is another significant use of the eye symbol in ancient Greece that I want at least to mention here. I cannot tie it to the Gorgon in any way, or to any of the other uses of the eye, except as a general sort of apotropaic device. This is the custom of painting an eye on either side of a ship's prow, supposedly to watch over the path of the ship and keep it from harm. Perhaps there is no other explanation needed. A series of articles in *American Neptune* in the 1950s debated the origin of these eyes. (See Richard LeBaron Bowen, "Martime Superstitions of the Arabs," *American Neptune* 15 [January 1955]: 5ff; Carroll Quigley, "Certain Considerations on the Origin and Diffusion of Oculi," *ibid.* 15 [July 1955]: 191–98; Bowen, "Origin and Diffusion of Oculi," *ibid.*, 17 [October 1957]: 262ff; and Quigley, "The Origin and Diffusion of Oculi: A Rejoinder," *ibid.* 18 [January 1958]: 25–29.) These devices on ships seem to date back to at least 2000 B.C.E. in Egypt and were common throughout the Roman and Greek worlds, reaching far beyond the Mediterranean to Africa and India. Exactly where the practice originated and how it spread is the subject of the debate between Bowen and Quigley. It seems to have been halted by the Muslims, who in this case took the Koranic injunction against depicting living creatures to heart. Nevertheless, in Aden the boats sport circular decorations in exactly the same positions occupied by the eyes on other boats, so perhaps this is another case of Islam's accommodating the decoration to the situation. At one point Bowen notes that Arab bow-patches were green rather than red as was often

the case elsewhere. He believed the red patches resulted from the use of a blood sacrifice upon launching a ship (akin to the present-day practice of breaking a bottle of champagne across the bow), and that the Arabs changed the patch to green when Islam proscribed blood sacrifices. Is sacrifice the origin of the boat eyes? Or is Carroll Quigley correct in ascribing them to symbols of the Egyptian goddess Isis that spread through the Mediterranean? Or are they the outgrowth of some normal bow feature on ships? The jury still seems to be out, and I still don't see any relationship to the Gorgon, except in a vague, apotropaic way

CHAPTER 10

1. Evans, *Chemistry of Death*, p. 9

2. Fatteh, *Handbook of Forensic Pathology*, pp. 24–25.

3. Aeschylus, *Aeschylus I: The Oresteia*, p. 136, ll. 52–54. Used with permission of the University of Chicago Press, Chicago, Ill. © 1953 by the University of Chicago. All rights reserved. Published 1953.

4. *Ibid.*, p. 131, l. 1058. Used with permission of the University of Chicago Press, Chicago, Ill. © 1953 by the University of Chicago. All rights reserved. Published 1953.

5. Cited in Wood, *The Civil War*, p. 236. The “arms extended in the air” of these bloated corpses recalls the common position of the arms of Stheno and Euryale as they pursue the escaping Perseus. They, too, hold their arms stretched over their heads in an unnatural fashion.

6. Tolstoy, *Childhood, Boyhood, and Youth*, p. 121–122.

7. To my knowledge, the only other suggestion that the appearance of a newly decayed corpse contributed to the image of a mythological figure was made by Tomio Watanabe, former medical examiner for Tokyo, who suggests that the image of the Indian figure of Garuda, the half-human king of the birds, draws its inspiration from such corpses (*Atlas of Legal Medicine*, p. 16). Watanabe notes that the protruding tongue and lips of a decomposing corpse resemble the beak of Garuda. Most images of Garuda, however, share few features in common with corpses or the Gorgon, and few even show protruding tongues. The general resemblance is so slight that I did not even include Garuda in my chapter on parallels. Another example Watanabe gives is the figure of Yama, judge of the dead, with his prominent eyes and his blue- or green-tinged skin (p. 14). A closer match is one between a decaying corpse and the image of a vampire, as noted by Paul Barber in his book *Vampires, Burial, and Death*. Barber makes an excellent case.

8. Chadwick Hansen, *Witchcraft at Salem* (New York: George Braziller, 1969), 1:280–281.

9. Ibid., 8:555–570.

10. *The Madness of Hercules*, in Euripides, 3:196–97, 204–5, ll. 867–870, 931–934.

11. Ibid., 3:198–99, l. 881–882.

12. Ibid., 3:232–33, l. 1267–1268.

CHAPTER 11

1. Pope, *The Dunciad*, Bk. 3, ll. 229–36.

2. Northwest Smith was surely one of the influences behind director/producer George Lucas’s decision to name his tough archaeologist hero Indiana Jones.

3. A “Medusan” appeared as an alien—an ambassador, no less—in “Is There in Truth No Beauty?,” an episode from the third season of the original *Star Trek* television series. The energy being is so ugly that it drives humanoids mad unless viewed through a special visor.

4. “Porkykarkus” requires some explanation. Not only does it sound like a Greek amplification of Porky, but it is also a parody of Parkyarkarkus, the name of a Greek character on a then-popular radio show. Parkyarkarkus, in turn, is obviously meant to be heard as “park your carcass”—that is, “sit down and stay a while.” Sometimes the anthropology of everyday life from only a few decades ago is fully as obscure as the anthropology of ancient cultures.

5. Perseus was called “the son of Hercules” in the American release because of the success of the 1957 film *Hercules* (released in the U.S. in 1959) and its 1959 sequel, *Hercules Unchained*. Both films were made in Italy by Warner Brothers and released there first. Other film companies quickly saw the advantage of releasing muscleman pictures dubbed into English, with the name of the hero—often Maciste—changed to Hercules. One distributor simply added a preface saying that *all* the various heroes were spiritually “sons of Hercules,” including Perseus.

6. The latter two are names of two of the Furies. Perhaps Stheno and Euryale were thought too hard to pronounce. The third Fury was Alecto, as given by Virgil.

7. Modern Bunraku performances take place in front of painted backdrops, before which the black-suited puppeteers are extremely visible. I have often suspected that they derive not from an agreed-upon convention of assumed invisibility, but from a time when the performances took place before a black backdrop. In that case the puppeteers would really have been invisible. The innovation of painted backdrops must then have been too much of a lure to ignore.

8. The name *Caliban*, like the word *cannibal*, is thought to be a

corruption of *Carib*, the name Caribbean natives gave themselves and the source for *Caribbean*.

9. Lovecraft, "The Call of Cthulhu," in *The Best of H. P. Lovecraft*, p. 77–78.

10. Lovecraft was also supposed to have edited a short story by Zealia Bishop, "Medusa's Coil," about a modern-day Gorgon.

11. The summer 1997 release of the Disney film *Hercules* brought the Gorgon back to the animated screen, albeit briefly. Perseus is mentioned early on by Philoctetes(!), in this incarnation a satyr-trainer. We briefly glimpse a statue of Perseus holding the head of Medusa, although later in the film Hercules fights a Gorgon in an extremely brief scene. More interesting is the film's unconventional view of the Fates, here seen as somewhat monstrous creatures, à la "The Shield of Hercules," rather than as beautiful goddesses. The animators appropriated the detachable eye of the Graiae for these cronelike Fates, which makes an interesting touch.

I note that there is a company called Gorgon Video, which specializes in tapes showing people being killed. A series of such films—*Faces of Death I*, *Faces of Death II*, etc.—has been issued. I asked representatives of this company why they chose the Gorgon as a symbol. It seemed appropriate, considering the previous chapter of this book. They said that it just seemed a good image for them. The company logo features a green-faced Beautiful-type Gorgon with a headful of snakes, although you wouldn't really call her beautiful.

12. This book was later adapted by Murdoch and J. B. Priestley into a play, and later still made into a motion picture. Oddly enough, one of its stars was Clair Bloom, who played Hera in *Clash of the Titans*.

13. Culpepper, *Philosophia in a Feminist Key*, 2:460, and "Ancient Gorgons," p. 22.

14. *Re/Search*, edited by Andrea Jano and V Vale. (San Francisco: Research Publications).

15. Mary Valentis and Anne Devane, *Female Rage* (New York: Crow Publishers, 1994), p 5.

16. Culpepper, "Ancient Gorgons," pp. 23–24, and *Philosophia in a Feminist Key*, 2:465–469.

17. Caputi, *Gorgons, Gossips, and Crones*, p. 166.

18. Culpepper, 1986, pp. 22–23.

19. Graves, *Greek Myths*, p. 245, and *The White Goddess*, p. 231.

20. Diane Velez, ed., *Reclaiming Medusa: Short Stories by Contemporary Puerto Rican Women* (San Francisco: Spinsters/Aunt Lute, 1988), p. 2.

21. "The Muse as Medusa," copyright © 1971 by May Sarton, from *May Sarton: Collected Poems, 1930–1993*. Reprinted by permission of W. W Norton and Company, Inc.
22. Elias-Button, "The Muse as Medusa," p. 204.
23. Barbara Deeming, "A Song for Gorgons," in McAllister, *Reweaving the Web of Life*, pp. 43–44.
24. Michelene Wandor, "Eve Meets Medusa," in Linthwaite, *Ain't I a Woman?*, pp. 115–16.

CHAPTER 12

1. Harris, *Cultural Materialism*, p. ix.
2. Ibid., pp. 55–56.
3. This is why aliens are often portrayed as "bug-eyed monsters," why eyes appear in nightmares, and why there is a horror movie entitled *The Crawling Eye*. No one has yet proposed a companion feature, *The Running Nose* (based on a story by N. Gogol).
4. Feldman [Howe], "Origin and Function of the Gorgon-Head," p. 212.
5. Lettvin, "The Gorgon's Eye," p. 78.
6. Just a suggestion: Isn't it interesting that the figures of Perseus, Medusa's head, and the horse's body line up on the vase just as the constellations do in the sky?

APPENDIX

1. Daniels, *Mythic Ireland*, p. 207.

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INDEX

- Aardal, Edwin, 208
Abas, 19, 148
Abydos, 46
Achilles, 145, 146, 147, 149, 188, 246
Acrisius, 19, 23, 25, 50, 51, 148, 204, 210, 211, 229, 245
Actaeon, 208
Action Comics, 11, 12
Adbhuta Ramayana, 69
Adonis, 239
Aegis, 24, 42, 43, 44, 45, 48, 49, 58, 81, 90, 93, 145, 148, 221
Aegisthus, 60
Aegle (Hesperides), 216
Aelian (Claudius Aelianus), 91
Aeneas, 195
Aeneid, 8, 60–61, 194
Aeschylus, 7, 8, 60, 187
Agamemnon, 6, 24, 60, 246
Agenor, 23
Agni, 69
Agra, 88
Akhenaton, 62, 63
Akroterion, 38, 82
Alalkomenia, 61
Alcaeus, 23
Alecto (Fury), 60–61, 195, 249
Alexander of Myndus, 89–91
Algol (variable star), 107, 108, 110–115, 116, 120, 121, 122, 123, 124, 127, 128, 131, 132, 135, 137, 140, 141, 142, 143, 227, 235, 239, 246
Algol, 114
Alien, 206
Alighieri, Dante, 194, 195
Alkomenia (Praxidike), 61

Allen, Richard Hinckley, 120, 121, 124, 129
Almagest. *See* *Syntaxis*
 Alpha Orionis. *See* Betelgeuse
 Amalthea, 43
 Amasis, 47
 Amazons, 25, 217, 220
 Amenhotep IV *See* Akhenaton
American Imago, 101
 Americas, 77–82
 Ammon, 212, 213
Amores, 67
 Anatha, 220
Ancient Maya, The, 80, 82
 Andress, Ursula, 210
 Andromeda, 22, 23, 26, 53, 54, 96, 129, 130, 131, 137, 142, 193,
 198, 210, 212, 213, 214, 215, 227, 229
 Andromeda (constellation), 129, 130, 132, 133, 227, 29
Andromeda (opera), 198
Andromeda (play), 130
Andromeda Liberata, 198
Andromeda e Perseo, 198
Angry Women, 217
 Anliker, James, 246
 Antefix, 163, 164, 165, 166, 183
 Antefix (Chinese and Japanese), 165, 167
 Anthony, St., 77
Antigone, 188
 Antiope, 220
Anubhavasikhamani, 68
 Anubis, 62
 Aphrodite (Venus), 210, 212, 217, 219
 Apollo, 95, 134, 234
 Apollo, temple at Metapontum (Italy), 167
 Apollodorus, 6, 7, 18, 21, 22, 24, 26, 43, 46, 48, 60, 87, 134, 136,
 138, 188, 195, 211, 221, 228, 243
 Apollonia ad Rhynduium, 46
 Apollonius of Rhodes, 6, 7, 18, 87, 139
Apologia, 161

Apotropaic device, 42, 84
Apuleius, 4
Aqua Sulis, 95
Aratus of Soli, 119
Arcani Microcosmi, 204
Archaic Fictile Revetments in Sicily and Magna Grecia, 171
Ares, 58, 147, 226
Arethusa (Hesperides), 216
Argonautica, 6, 7, 18, 139
Argonauts, 5, 7
Argos, 17, 18, 19, 23, 24, 26, 38, 138, 142, 148, 211, 213
Argus, 93
Aristophanes, 54
Aristotle, 101
Artemis, 217, 219
Artemis, temple at Corcyra, 39
Artemis Ortheia, sanctuary of, 36
Arthur, King, 9, 10
Artorius Rex Discovered, 9
Ashe, Geoffrey, 9
Astronomica, 129
Athamas, 5, 6
Athena, 8, 17, 20, 22, 24, 25, 27, 38, 41, 42, 43, 44, 46, 48, 49, 52,
53, 58, 96, 98, 134, 136, 137, 139, 145, 147, 148, 159, 210, 212,
214, 217, 219, 220, 227
Athenaeus, 88–90
Atlas, 8, 133
Atropos (Fate), 59–60
Aulis (Praxidike), 61
Ault Hucknall, 84
Axayacatl, 78
Aztec Calendar Stone, 55, 56, 57, 78, 95, 234
Aztecs, 55, 56, 78, 80, 95, 184

Bacchus, 180
Badawy, Alexander, 169
Baez, Joan, 208
Baghdad, 57
Barber, Chris, 9

Barber, Paul, 234, 248
Bar Freston, 84
Barong (Barong Keket), 73
Barr, Roseanne, 218
Basilisk, 91
Baubo, 98
Bayer, Johannes, 107, 117, 119, 127, 128
Beaumont, Charles, 203
Bella Coola, 77
Bellerophon, 8, 135, 136, 137, 138, 142, 212, 227, 240, 241
Bellerus, 136
Bengal, 69, 70, 71
Ben-Hur, 107
Beowulf, 194
Berliner Astronomischer Jahrbuch, 113
Bernard of Clairvaux, St., 161–162, 170, 247
Bes, 64, 65, 94, 184, 185, 229
Beset, 63
Bestiary, 204
Beta Persei. *See* Algol
Beta Lyrae (variable star), 114
Betelgeuse (variable star), 132
Bierce, Ambrose, 183
Birt, W. D., 246
Bishop, Zelia, 249
Blackett, Baram, 9
Blinkenberg, C., 94
Bloom, Claire, 210, 249
Bly, Robert, 3
Bobrovnikoff, N. T., 122
Bodaidaruma. *See* Bodhidharma
Bodhidharma, 76–77
Boeotia, 5, 6, 36, 61
Bologna, 54
Bolt, Robert, 210
Bond, James, 27
Bone, Neil, 126
The Book of the Sword, 28

Boothroyd, Major, 27
Boreas, 87–88
Borglum, Gutzon, 168
Borneo, 83, 172, 188
Boulding, Elise, 221
Boulliau, Ismael. *See* Bullialdus
Bowers, Susan P., 221
Bowker, Judi, 213
Brahe, Tycho, 108, 109
Braidwood, Thomas, 111
Brueghel, Pieter the Elder, 189
Bruhl, Count, de, 114
Brussels Academy, 111
Brut, 9
Bubo, 213, 214
Budapest, Z., 220
Bulfinch, Thomas, 200
Bullialdus, 109, 112
Bunraku, 210, 249
Burne-Jones, Edward, 200
Burnham, Robert, 110, 116, 183
Burnham's Celestial Handbook, 110, 114, 116, 183
Burton, Sir Richard Francis, 28, 29
Buswell, G. T., 152
Butades, 163, 164, 171

Cadmus, 5
Calcutta, 70, 72
Caliban, 21, 249
Calibos, 210–214
Callirhoe, 22
Camp, Lyon Sprague, de, 215
Campbell, John, 11
Campbell, Joseph, 3, 68, 76, 229
Caputi, Jane, 218–219
Caravaggio, Michaelangelo, 196, 197
Carbe, Nino, 208
Caria, 136

Carlson, Robert, 208
Carlson, J. B., 240
Carmenta, 221
Carriere, Matthieu, 208
Carter, Lin, 215
Cassiopeia (Cassiopeia), 22–24, 212, 213, 229
Cassiopeia (constellation), 130, 132, 133, 227
Catoblepas, 92, 186
Cecrops, 93, 214
Cellini, Benvenuto, 29, 198, 199, 200
Centaurs, 88, 93
Cepheid meteorites, 242
Cepheid variable stars, 115
Cepheus, 22, 23, 211, 212, 229
Cepheus (in myth of Hercules), 134, 135
Cepheus (constellation), 130, 131, 132, 133, 227
Cerberus, 24, 93, 136, 210
Cetus. *See* Ketos
Cetus (constellation), 122, 130, 131, 132, 133, 227
Charcot, J. M., 190
Charon, 213
Chavin, 81, 184, 186
Chicago, Judy, 220
Chi Cygni (variable star), 14, 132
Chien K'ang. *See* Nanking
Childhood, Boyhood, Youth, 189–190
Chimaera, 22, 88, 136, 137, 138, 142, 175, 227
China, 82, 84, 94, 123
Chin Shu (star), 123
Chou, 75
Chrétien de Troyes, 10
Chrysaor, 22, 23, 37, 38, 39, 46, 48, 49, 50, 99, 102, 138, 139, 140,
142, 147, 209, 214, 227, 235
Chrysococca, 120
Cicero, Marcus Tullius, 43, 119
Circus of Dr. Lao, The, 3, 84, 201, 225
Clair, Jean, 98
Clampett, Bob, 202

Clash of the Titans, 209–215, 249
Claudius the God, 95
 Clement of Alexandria, 95
Cliges, 10
 Cline, Thomas, 151
 Close, Glenn, 218
 Clotho (Fate), 59–60
 Clytemnestra, 6, 60
 Coatlicue, 78, 79
 Cocijo, 80, 82
 Coins, Gorgons on, 33, 34, 43, 46, 95
 Collyer, Bud, 12
 Columbus, Christopher, 193
Comus (masque), 198
 Conjeeveram, 76
 Conover, Michael J., 174
Conspiracy of Catiline, 90
Cont du Graal, 10
 Cook, Arthur Bernard, 41, 43, 45, 49, 57, 62, 139, 157, 185, 232, 235, 245
 Corcyra, 38, 39, 99
 Corfu, 38, 39, 46, 235
 Corinth, 17, 23, 35, 37, 38, 46, 136, 138, 142
 Cornsweet, T. N., 151
 Cott, Hugh B., 172
 Covarrubias, Miguel, 184
 Crab Nebula, 109
 Crane, H. D., 151
 Crawford, O. G. S., 178
Crawling Eye, The, 250
 Croesus, King, 204–207
 Croesus Latitarsus. *See* Sawfly larva
 Croon, J. H., 95
 Cross, Beverley, 209, 210, 213
 Cthulhu, 215
 Cuauhxicalli. *See* Aztec Calendar Stone
 Culpepper, Emily Erwin, 217, 218, 219, 220
 Cultural materialism, 230–232

Cultural Materialism, 230
Cushing, Peter, 207
Cyclades, 19, 20
Cyclops, 17, 93
Cyprus, 48, 193

Dakshineswar, 70, 72
Danae, 19, 20, 23, 24, 50, 51, 204–207, 210, 212, 215, 229, 240
Danae and shower of gold, 26, 50, 51, 52, 227, 229, 245
Danaids, 19
Danaus, 19
Dancing with Goddesses, 224
Danforth, Jim, 203
Daniel, C. E., 178
D’Annunzio, Gabriele, 196
Daphne, 219
Darling, Wendy, 148
Daruma doll, 76–77, 172, 174
Davis, Desmond, 209
Decomposition, 186–190
Deeming, Barbara, 222
Defoe, Daniel, 186
Deimos (panic), 58
Deino (Graiae), 20, 59
Deipnosophists, The, 88–90
Deliades, 136
Delphi, 187, 226, 228
Delta Cephei (variable star), 114, 131, 141
Demoniaques dans l’Art, Les, 190
Dent, Lester, 10
Derbyshire, 84
Devane, Anne, 218
Devil, 228
Devil’s Dictionary, The, 183
Devī Māhātmya, 69
Devine, J. Llewellyn, 207
Did Jesus Exist?, 239
Diktys, 20, 23, 211, 229, 240

Dil-Gan (constellation), 122
Diner, Helen, 220
Dinner Party, The, 220
Diodorus Siculus, 25, 43
Dionysius Skytobrachion, 4, 25, 43, 89, 148, 220
Dionysus, 164, 171
Dioskourides, 156
Dis, 195
Discovery of King Arthur, The, 9
Disney Studios, 249
Divine Comedy, 194
Doc Savage, 10, 11
Doctorow, E. L., 25
Dodge, Raymond, 151
Donenfeld, Harry, 11
Double Stars, 121
Dresdenische Gelehrte Anzeigen, 113
Dunciad, 24, 198
Durga, 73
Dyaks, 43
Dykewomon, Elana, 219

Eagle's Bowl. *See* Aztec Calendar Stone
Echidna, 136, 219
Echo, 208
Eckholm, G. F., 185
Edinburgh, 111
Eggen, Olin J., 115
Egypt, 31, 94
Electryon, 23
Eleusis, 37, 46
Elias-Button, Karen, 222
Elworthy, F. T., 100, 121, 164, 171, 185, 232, 233
Enkidu, 64
Enyo (Graiae), 20, 59
Eratosthenes, 119
Erechtheus, 87
Eric et Enide, 10

Ericson, John, 203
 Erinyes. *See* Furies
 Erlangga, 73
 Erotes, Tomb of, 44, 45
 Erythia (Hesperides), 216
 Estes, Clarissa, 3
 Eta Aquilae (variable star), 114, 132
 Eta Aurigae (variable star), 122
 Ethiopia, 22, 26, 134
 Eudoxos of Cnidos, 119
 Eumenides. *See* Furies, 66
Eumenides, 60, 187
 Euripides, 7, 8, 25, 54, 130, 148, 191
 Europe, 83–84
 Euryale (Gorgon), 21, 22, 33, 35, 41, 48, 49, 57, 102, 125, 216, 248, 249
 Eurydice, 208
 Eurynomos, 57, 59, 187, 188, 226, 228
 Evans, W. D., 234
Eve Meets Medusa, 223–234
Exact Sciences in Antiquity, The, 122
Exorcist, The, 65
Eye Goddess, The, 178, 180
Eye Movements and Vision, 153–155

 Fabricius, David, 108
 Fabricius, Johann, 108
Face of the Earth: Frontality in Mesoamerican Art, The, 56, 78, 79, 149, 244
 Face of glory. *See* Kirtimukha
Faces of Death, 249
 Facius, J., 94
 Falk, Lee, 243
 Fang Ting, 74, 75
Fantasia, 208
Fatal Attraction, 218
 Fates, 59–60, 159, 249
 Father Time, 241
Female Rage: Unlocking Its Secrets, Claiming Its Power, 218

Ferenczi, Sandor, 98
Finney, Charles Grandison, 3, 87, 201, 225
First Man in Rome, The, 90
Fisher, John, 189
Fisher, Terence, 207
Fleetwood, Susan, 210
Fleming, Andrew, 178
Flügel, J. C., 98
Folk-Lore Society (London), 100
Forbidden Planet, 225
Forensic Medicine, 187
Foster, Alan Dean, 215
Fourth Eclogue, 194
Fraser, Douglas, 185
Frazer, Sir James George, 21, 200
Freud, Sigmund, 55, 97–98, 101
Frobisher, 193
Frontisi-Ducroux, Françoise, 178
Frothingham, 95
Furies, 59, 60–61, 93, 187–188, 195, 249
Furness building, 169
Furtwangler, 31, 93

Gaddiano, Anonimo, 196
Gaedeckens, E. R., 95
Gaia, 25, 211
Gaiman, Neil, 216
Gaines, M. C., 11
Gaius Marius, 90
Galen, 89
Galilei, Galileo, 108
Gallinor, 204–207
Gamma Cassiopeia (variable star), 131–132, 141, 246
Gamma Persei (variable star), 246
Gargoyles, 83–84, 161–181, 229
Gartner, Christian, 113
Garuda, 248
Gaster, Theodore, 65

Gates of Hell (sculpture), 200
 Gavrinis, 178
Genesis, 136
 Geoffrey of Monmouth, 9
Geography, 89
 Gerhard, E., 95
 Germanicus Caesar, 119
 Gerojannis, K., 94
 Geryones, 22, 195
 Gesner, Konrad, 101
 Gilgamesh, 84
Gilgamesh, Epic of, 64
 Gill, Sarah, 83
 Gilling, John, 207
 Gimbutas, Marija, 244
Gladiator, 10, 11
 Glutton, 74, 75
 Golden Apples of Hesperides, 133, 216
Golden Ass, 4
 Golden Fleece, 3, 5, 6, 14, 209
 Goldman, Bernard, 94
 Goodrich, Norma Lorre, 9, 220
 Goodricke, John, 111–115, 131, 141
 Goold, G. P., 129–130, 246
 Gorgo, 61
Gorgo, 196
 Gorgon, 4, 8, 14, 20, 21, 24, 25, 26, 27, 28, 31–47, 49, 59, 60, 62, 84, 88, 90–104, 120, 121, 124, 125, 131, 134, 139, 140, 142, 143, 145, 147, 148, 150, 159, 161–181, 183–191, 194, 195, 198, 200, 209, 213, 214, 215, 219, 220, 225, 228, 233, 235, 243, 244, 245, 249
 archaic, 2, 1, 32, 34, 47, 55, 56, 57, 58, 235
 as aurora, 95
 beautiful or late, 33, 34, 35, 41, 57
 as fear, 94–95
 as gorilla, 94, 229
 and hot springs, 95
 as lion, 94, 229
 middle or transitional, 33

as moon, 95, 234, 245
as nightmare, 95
as octopus / squid, 227, 229, 234
as scarecrow, 229
as sun, 95, 234
as symbol of female rage, 217–224
as vulva, 229

Gorgon, The, 207–209

“Gorgon, The”, 201, 217

Gorgoneion, 31, 32, 40, 42, 43, 44, 47, 50, 54, 57, 81, 93, 100, 146,
147, 149, 166, 172, 176, 190, 235, 237, 246

Die Gorgonen und Verwandtes, 93

The Gorgons Head and Other Literary Pieces, 200

Gorgon video, 249

Gorgophone, 23

Gossips, Gorgons, and Crones, 218–219

Graiae, 20, 26, 51–53, 59, 102, 104, 125, 127, 128, 131, 141, 142,
209, 213, 227, 249

Grasamukha, 66

Graves, Robert, 6, 14, 28, 95–97, 99, 134, 221, 229

Great Bear. *See* Ursa Major

The Great Cosmic Mother, 220

Great Head, 77

Greek Fictile Revetments in the Archaic Period, 171

The Greek Myths, 14, 95–97

Green, G. H., 101

Grendel, 194

Grotesques, 83–84, 175

Grey, Lady Jane, 189

Guerra, Mario, 210

Guerrero, 80, 82

Hades, 7, 21, 22, 27, 28, 61, 140, 187, 194, 210, 221, 226

Haida, 77

Haliartos, 61

Halley’s Comet, 113

Hamilton, Edith, 6, 17, 200

Hampshire, Susan, 208

Handbook of Greek Mythology, 101

Harpe (sword), 21, 28, 48, 49, 128, 134, 140, 142, 229, 241
Harpies, 195
Harris, Marvin, 230–232
Harrison, Jane, 60, 187, 188
Harryhausen, Ray, 209–215
Hartland, Edwin, 14
Hathor, 62
Hay, 95
Head of the Medusa, 197–199
The Hebrew Myths, 95
Hecate (Hecate Trevia), 59, 62
Hector, 145, 188
Heinsius, Gottfried, 113
Heintz, Wulff D., 121
Heleus, 23
Hell, 194, 195, 228
Helle, 5, 8
Henry VIII of England, 189
Hephaestus (Vulcan), 145, 147, 213
Hera, 98, 91, 195, 210, 212, 217, 219
Hera, temple at Croton, 167
Hercules (Heracles), 24, 27, 44, 46, 133, 134, 135, 137, 142, 191,
200, 209, 216, 221, 227, 241
Hercules, 3, 249
Hermes, 17, 20, 21, 24, 27, 47, 48, 49, 52, 53, 96, 101, 208, 209, 210,
217, 221
Hermotimus, 88
Herodotus, 22, 43, 128–130
Hero with a Thousand Faces, 3, 229
Herrick, Edward, 246
Herschel, John, 114
Herschel, William, 111, 112, 114, 115
Herse, 208
Hesiod, 18, 22, 59, 140, 235
Hesione, 27, 134, 135, 137, 142
Herpere (Hesperides), 216
Hesperides, 133, 216
Hevelius, Johannes (Heweliusza), 108–110

Hipparchus, 119, 125, 127
Hippogorgon, 36, 37, 135
Hiryakashipu, 68
Historia Animalium, 101
Historiola Delia Mira Stellae, 108–109
Histories, 22, 130
History of Four-Footed Beasts, 91–92
History of the Kings of Britain, 9
Hoffman, Gotthold, 113
Hogarth, William, 241
Holmes, Sherlock, 195
Holwarda, Phocylides, 108
Homer, 4, 8, 24, 35, 57, 58, 60, 93, 136, 145, 195, 228
Homoelle, 95
Hopkins, Clark, 65, 84, 95, 185
Horus, 62
Hoskin, Michael, 111
Howe, Thalia Phyllies (Feldman), 8, 93, 232
Hsin-T'sun, 73
Hsing Ching, 123
Huber, Daniel, 115
Humbaba (Huwawa), 55, 64, 65, 84, 184, 229
Hunchback of Notre Dame, 174
Hyades (constellation), 145
Hydra, 136, 198, 209, 241
Hyginus, 7, 23, 25, 120
Hyman, Prudence, 208

Iatmul, 149
I, Claudius, 95
Iliad, 6, 8, 24, 45, 58, 93, 145, 188, 212, 246
India, 66–72, 84, 123
Indonesia, 72–73, 94
Inquiry into Birds, 89–90
Ino, 5, 7
Io, 219
Iobates, 136–138
Ion, 8, 25, 148

Iphigenia, 6, 219
Iron John, 3
Iroquois, 77
Isis, 221
It Came from Beneath the Sea, 211
Ixion, 5

Jaffa. *See* Joppa
Jaguar God, 149
Jahn, Otto, 98
Jaina Island, 80
Janus, 239
Japan, 76–77, 82, 84
Jason, 5
Jason and the Argonauts, 209–210
Jones, Charles M., 202
Jones, Ernest, 98
Joppa, 22, 26, 193–194 211, 212, 213, 214
Joseph, 136
Journey to Avalon, 9
Judah, 26
Jugurtha, 90
Juno. *See* Hera

Kala-Makara, 66, 68
Kali (Smashan Kali), 68–72, 84, 184, 188, 221
Kalidasa, 69
Kalgata. *See* Calcutta
Kalimantan, 83
Karanova, 244
Karnak, 116
Kay, Charles, de, 169
Kayan, 172
Kaye, Laura, 219
Keatman, Martin, 9
Kent, 84
Kent, Clark, 6, 11–13
Keraunos (thunderbolt), 14
Ketos (Cetus), 21, 22, 26, 53, 54, 127, 131, 142, 194, 211, 220, 227

in myth of Hercules, 27, 134–135, 227, 241

Khnum, 62

Kibisis (wallet), 21, 23, 28, 33, 48, 49, 54, 96, 102, 139, 141, 142, 214

King Arthur, 9

King Arthur: The True Story, 9

King, Stephen, 170

King Kong, 206

Kinsley, David R., 68–69

Kirch, Christfried, 110

Kirtimukha (face of glory), 55, 66–68, 72, 84, 94, 148, 184, 194, 233, 239

Klee, Paul, 200

Klein, Cecelia F., 56, 78, 79, 149, 244

Kliban, B., 228

Knapp, Elizabeth, 190–191

Knight, Richard Paine, 98

Kraken, 100, 101, 210, 211, 213, 214

Kronos, 241

Kugler, Franz Xavier, 122

Kumarasambhava, 69

Kumel, Harry, 208

Kummernis, St., 13

Kuo P'o, 75

Kwakiutl, 77

Kylix (eye cup), 177

Kyrenaike (hydria), 41

Lacedaemonians, 134

Lachesis (Fates), 59–60

LaFond, 173

Lambda Persei (Tsi-Chou, star), 140

Lambda Tauri (star), 132

Lament of Danae, 19

Lamia, 73

Lampedo, 220

Lancelot, 10

Lane, Lois, 6, 11–13

Landolt, Hans Heinrich, 150–151

Langdon, Stephen Herbert, 65
Laomedon, 134
Laon Cathedral, 167
Larissa, 23, 26
Larson, Gary, 4, 228
St. Lawrence, tears of, 245–246
Lawrence of Arabia, 210
Layamon, 16
Lean, David, 210
Learches, 5
Lee, Christopher, 207
Lee, Tanith, 201
Leo (constellation), 127
Lesche, 58–59, 228
Lettvin, Jerome Y., 101–104, 121–122, 124, 132, 227, 232, 233, 245
Levenzow, 95
Lexikon, 93, 99
Ley, Willy, 101, 232
Libation Bearers, 60, 188
Liberata, St., 13
Library, 18, 195
Libya, 43, 95
Lilith, 73, 120
Lilitu, 73
Lives, 90
Lives of the Artists, 195–196
St. Livrade, 13
Locke, John, 246
Louvre, 36, 40, 135
Lovat, Lord Friser, de, 189
Lovecraft, Howard Phillips, 215, 249
Lowick, 84
Lucian, 89, 92
Lully, Jean-Baptiste, 198, 206
Lupton, Froggi, 217
Lu Pu-Wei, 75
Lu Shih Ch'un Ch'iu, 75
Lycia, 136

Lynceus, 19

Macbeth, 213

Macbeth, Lady, 218

Madness of Hercules, 191

Magazine of Art, 168

Mahabharata, 69

Malatimadhava, 69

Malory, Sir Thomas, 10, 24

Malpertuis, 208–209

Mandeville, Sir John, 193–194

Manelli, Francesco, 198

Mania, 241

Manilius, 120, 129

Maori, 82, 184, 186

Maraldi, 100, 114

Marduk, 28, 134

Mark, 26

Martino, Luciano, 210

Maskelyne, Nevil, 111–112

Masks of God, The, 3

Matino, Alberto, de, 206

Matthew, 26

Maxell, Bob, 12

Maya History and Religion, 81

Mayans, 80–81, 82, 149, 150, 159, 184

Mayavati. *See* Algol

Mayer, 98

McCarthy, Neil, 212

McCool, Finn, 240

McTiernan, John, 215

Mediterranean Sea, 102, 103

Medusa, 15, 17, 21, 23, 24, 26, 27, 33, 36, 38, 39, 41, 46, 47, 48, 49,
57, 59, 96, 102, 104, 117, 121, 125, 127, 128, 135, 138, 139, 140,
141, 143, 145, 147, 183, 188, 195, 196, 198, 200, 202, 203, 204–
209, 210, 211, 213, 214, 216, 217, 218, 220, 221, 223, 224, 227,
235, 249

MEDUSA (organization), 218, 220

Medusa Against the Son of Hercules. See *Perseo l'Invincibile*

Medusa's Coil, 249
Medusa's Head. See "Medusenhaupt, Das"
 "Medusenhaupt, Das", 55, 97
 Megaera (Fury), 60–61, 195, 207
 Megapenthes, 23
 Melicertes, 5
 Melos, 244
 Memnon, 146
 Meredith, Burgess, 212
 Merlin, 9, 10
 Mesopotamia, 64–65
 Mestor, 23
Metamorphoses, 6, 18, 21, 42, 208–209
Meteors, 126
 Metope, 39
 Meyer, Eduard, 64
 Mictecacihuatl, 79, 80, 188
 Midas of Akragas, 41–42
 Miletus, 99
 Miller, Arthur, 98
 Milton, John, 198, 228
 Minerva. See Athena
 Minotaur, 93
 Mira (variable star), 107–110, 110, 111, 112, 113–116, 122, 127–128, 131, 137, 141, 142, 227
 Mistress of Animals, 99
 Mithras, 241
 Moerae. See Fates
 Montanari, Geminiano, 110, 114
 Montford, Denys, de, 211
 Moore, A. D., 130
 Moore, Catherine L., 201
 Mor, Barbara, 220
Moralia, 89
 More, Sir Thomas, 189
Morte d'Arthur, Le, 10, 24
Moses and Monotheism, 97
 Mother Goddess (Great Mother), 99

Mothers and Amazons, 220
Moyers, Bill, 3
Mukherji, Kalinath, 123
Muller, Max, 62
Mundaka Upanishad, 69
Murdoch, Iris, 217, 249
 Severed Head, A, 217
The Muse as Medusa, 221–222
Mysia, 46
Mythology, 17

Nanking, 76
Naples, 103
Narasimha, 68
Narcissus, 208
Natural History, 91
Nauplia, 36
Necrocorinthia, 31
Negri, Filippo, 196
Neith, 220
Nephele, 5, 6
Nereids, 22, 146, 147
Neugebauer, Otto, 122
Neumann, Erich, 99
New Caledonia, 83, 188
Newgrange, 116, 178
New Guinea, 83, 172
New Ireland, 83, 188
New Patterns in the Sky, The, 121
New Zealand, 82–83, 100, 172, 188
Ngadju, 83
Nikator, 46
Nikias, 54
Nineveh, 100
Noah, 193–194
Nootka, 77
Northern Exposure, 3
Northumberland, 84

Nova Stella, de, 109
Nymphs, 20, 21, 23, 26, 27, 101

Oaxaca, 80
Ocean (stream), 21
Ocean (Titan), 22
O'Connell, Arthur, 203
Oculus (eye-spot) on ships, 247–248
Odysseus (Ulysses), 24, 59, 124, 228
Odyssey, 6, 8, 57, 95, 140, 28
Oedipus, 165
Ohm, J., 151
Olaus Magnus, 100, 101, 211
Olbers, Wilhelm, 113
Olivier, Sir Laurence, 210, 217
Olmec, 240
Olympus, 5, 136
Olympus, Mount, 23
Omicron Ceti. *See* Mira
Onigawara (tile), 167
On the Medusa of Leonardo da Vinci in the Florentine Gallery, 196
Operas, 198, 206
Oreithuia, 87–88
Orestes, 60
Orestes, 60
Orion (constellation), 132, 145
Orpheus, 208
Osiris, 239
Ossa, Mount, 23
Ot Danum, 83
Otthi, 95
Ötzi, 7
Orpheus and Orphies, 95
Ovid (Publius Ovidius Naso), 4, 6, 8, 18, 21, 24, 26, 42, 59, 133, 195, 208, 209, 214

Pacific cultures, 82–84
Pacing the Void, 123
Padmapurana, 67

Pal, George, 10, 202–204
Palatine Anthology, 156
 Palermo, 37, 39
 Palitzsch, Johann Georg, 112–115, 141
 Pallas (giant), 43, 148
Paradise Lost, 198
 Paris Academy of Science, 111, 113
 Parks, Fanny, 71
 Parthenon, 167
The Patriot. See Philopatris
 Patterson, Ray, 208
 Patroclus, 145
 Pausanias, 7, 14, 25, 26, 46, 87, 187, 220
 Payne, Humfrey, 31, 183
 Pazuzu, 65
 Pegasus, 8, 22, 23, 38, 39, 46, 48, 49, 50, 62, 88, 99, 102, 137, 139, 140, 142, 147, 198, 209, 210, 214, 227, 235
 Pegasus (constellation), 130, 132, 133, 137, 138, 140, 235
 Peloponnese, 17
 Pemphredo (Graiae), 20, 59
 Penthesilea, 220
Perceval, 10
Persée, 198
 Perseid Meteors, 125, 126, 127, 141, 227, 235, 241, 245, 246
Perseo, 198
Perseo l'Invincibile (Perseus the Invincible), 209, 215
 Persephone, 228
 Perses, 23
 Persia, 23
 Perseus, 8, 14, 15, 17–29, 33, 36, 37, 47, 48, 49, 50, 51, 51, 53, 54, 57, 84, 96, 99, 101, 117, 121, 125, 129, 130, 131, 133, 134, 135, 136, 137, 138, 139, 142, 145, 148, 204–207, 208–209, 210, 212, 213, 221, 227, 229, 234, 240, 243, 248, 249
 Perseus (constellation), 125, 127, 128, 129, 130, 132, 133, 229, 235, 241
 PERSEUS (device), 246
Perseus: A Study in Greek Art and Legend, 47, 50, 52
Perseus and the Gorgon's Head, 210, 211. *See also Clash of the Titans*
Perseus Holding the Head of Medusa, 198–199, 200

Peru, 81, 100
Peter Pan, 148
Phaedrus, 87–88
Phaedrus, 87–88
Phansigars, 71
Phantom, The, 243
Pherekydes, 18, 19, 21, 23, 26, 59, 87, 243
Phillips, Graham, 9
Philonoe, 136, 137
Philopatris, 92
Philosophia in a Feminist Key, 217
Phineus, 22, 132, 210, 211
Phobos (fear), 57, 58, 99, 158, 159, 226
Phorkides. *See* Graiae
Phorkys, 20, 21, 25, 16, 52, 53, 59, 127, 220
Phrynichus, 54
Phryxus, 5, 7, 8
Picasso, Pablo, 200
Pigott, Edward, 111–115, 141
Pigott, Nathaniel, 111
Pindar, 7, 20, 41–42, 46, 125, 136
Plato, 87–88
Pleiades (constellation), 145
Pliny the Elder (Gaius Plinius Secundus), 54, 91, 163, 164
Ploog, Mike, 208
Plutarch, 89, 90, 95
Pluto. *See* Hades
Pointer Sisters, 208
Pollux, Julian, 244
Polydektes, 20, 24, 54, 135, 211, 229, 243
Polyeidus, 136
Polygnotos, 58
Pompeii, 167
Pope, Alexander, 24, 198
Popular Hindu Astronomy, 123
Porky Pig, 202
Porky's Hero Agency, 202
Poseidon, 6, 22, 24, 52, 53, 69, 134, 135, 210, 211, 220

Potiphar, 136
Pralahda, 68
Pratt, Annis, 224
Praxidikae, 59, 69
Praxinoa, 61–62
Praz, Mario, 199
Predator, 215
Priestesses, 220
Priestley, J. A., 249
Princeton University, 168
Proetus, 19, 136, 137, 148
Prokles, 25
Prokopy, Ronald J., 173, 174
Prose di Signore Academici Gelati de Bologna, 110
Prospero, 211
Pseudo-Eratosthenes, 119, 127, 130
Psychotronic Encyclopedia of Film, 208
Ptolemy, Claudius, 108, 118, 119, 120, 127
Pykit, David, 9
Pyramid texts, 62

Quetelet, Adolphe, 246
Quintus Smyrnaeus, 93

R Coronae Borealis (star), 115
R Hydrae (star), 112
Radermacher, L., 245
Rahu, 66, 67, 68
Rahurmukha, 66
Raimi, Sam, 3
Rama, 70
Ramakrishna, 70
Rambaldi, Carlo, 206
Ramprasad, 70
Randall, Tony, 202–203
Rangda, 72, 73, 184
Ravana, 70
Reclaiming Medusa, 221
Redgrave, G. R., 168

Repin, I. E., 152, 155
Re/Search, 217
Rho Persei (variable star), 122, 131, 141
Richer, Paul, 190
Ridgeway, William, 43, 45, 90, 94
Robbins-Dexter, Miriam, 180
Rodin, Auguste, 200
Rolling Stones, 208
Roman de Brut, 10
Romantic Agony, The, 200
Rondanini Medusa, 41, 46
Roof tiles, 163–167
Roscher, Wilhelm Heinrich, 31, 33, 35, 93, 99
Rose, H. J., 101, 232
Ross, Alexander, 204
Royal Society of London, 111, 112, 114, 115
Royal Society of London journal of the, 112, 114
Rubens, Peter Paul, 196, 198, 199

Sabula, L. Cossutius, 96
Saccadic motion, 151, 153
Sahade, Jorge, 123
Salem witchcraft, 190–191
Sallust, 90
Salmoneus, 6
Sandman: The Kindly Ones, 216
Sarawak, 83
Sargent, John Singer, 200
Sargon of Agade, 64
Sarton, May, 221
Satyr, 166
Sawfly larva (*Croesus latitarsus*), 235, 236, 237
Schafer, Edward H., 123
Schaumberger, Johann, 122
Schnier, Jacques, 101, 232
Scholiast, 18
Schuster, Joe, 11
Schwartzenegger, Arnold, 215

Scorpio (constellation), 127
Scott, A. P., 245
Scylla, 219
Seleukos, 46
Selinus, 39
Sepik River (Iatmul), 83, 149, 150, 159, 184
Seriphos, 19, 22, 23, 25, 26, 95, 134, 211
Sessler, Levina, 111
The Seven Faces of Dr. Lao, 202–204, 209
The Seventh Voyage of Sinbad, 214
Severed Head, A, 217
Sewell, William, 115
Shamash, 64, 65
“Shamblau”, 201, 217
Shang, 73
Sharer, Robert J., 80, 82
She-Devil, 218
Shelley, Barbara, 207–208
Shelley, Percy Bysshe, 196, 197
Shensi, 75
Shepherd, Rev. Anthony, 112
Shield of Hercules, 18, 21, 31, 58, 59, 60, 145, 158, 215, 243–244, 247, 249
Shiva, 67, 68, 70
Sicily, 37, 38
Siegel, Jerome, 11
Sigman, Jorg, 196
Silenus, 166
Simhamukkha, 66, 94
Simhika, 68
Simonides of Keos, 19, 87, 212
Simpson, Keith, 187
Sinister Wisdom, 219
Singa, 73, 94
Siret, L., 101
Sirius (star), 107, 245
Sisias, 73
Sisyphus, 136

Six, J., 95
Sjoo, Monica, 220
Skandapurana, 67
Skiathos, 210
Slater, Philip, 98
Sleeman, William, 71
Smith, Maggie, 210
Smith, Sidney, 64
Socrates, 87–89
“A Solution of the Gorgon Myth”, 100
A Song for Gorgons, 222–223
Sophocles, 7, 25, 54, 130, 188
Sparta, 17, 36, 226
Sphinx, 165
Staal, Julius D. W., 121, 131, 141
Star Names and Their Meanings, 120
Star Trek, 7, 248
Star Wars, 213
Stebbins, J. C., 115
Sternkunde und Sterndienst im Babel, 122
Sterope, 134
Stheneboea, 136–138
Sthenlaus, 23
Stheno (Gorgon), 21, 22, 33, 35, 41, 48, 49, 57, 102, 125, 216, 248, 249
Stonehenge, 116
Strabo, 89
Stygian witches, 213
Styx, river, 213
Al-Sufi, Ramah, 117, 118, 128
SU. Gl (constellation), 122
Sully, Maurice, de, 165
Sumatra, 73
Superman, 243
Sword and the Flute, The, 68
Syama Praharanam, 69
Symposium, 89
Syntaxis, 108, 118, 119

Syracuse, 38

Takashi, 208–209

Taiwan, 244

T'ao T'ieh, 74, 75, 76, 94, 186

Tarsus, 46

Tecpatl, 78

Tegea, 46

Tell Asmar, 57

Tempest, The, 211

The Temple of My Familiar, 220

Tennson, Alfred Lord, 211

Teotihuacan, 80, 82

Thebes, 5

Thelewit, Klaus, 98

Thelxinia (Praxidike), 61

Theocritus of Syracuse, 61–62

Theogeny, 22, 140

Theseus, 195

Thetis, 147, 210, 211, 212, 213, 217, 219

They Will Know Me by My Teeth, 219

The Things of Greater Importance. See Apologia

Thomas, Jim, 215

Thomas, John, 215

Thompson, Eric S., 81

Thomson, Stith, 14

Thugs, Thuggee, 71–72

Tiamat, 134

T'ien Tchouen (constellation), 140

Tiryns, 17, 19, 23, 26, 36, 38, 136, 138, 142, 226, 227

Tisiphone (Fury), 195, 207

Titans, 210, 211

“Tjalon Arang”, 73

Tlaloc, 80, 82

Tlaltecuhli, 79

Tlingit, 77

Tolstoy, Leo, 189–190

Tonatiuh, 55, 56, 187

Topsell, Edward, 91–92
Triple Goddess, 96, 221
Tritonis, Lake, 21, 25, 96, 125, 141, 213
Triumph of Death, 189
Troilus, 146
Trojans, 145
Trojan Horse, 165
Trojan War, 134, 195
Troy, 134
Tsi-Chi. *See* Algol
Tsimshian, 77
Tso Chuan, 75
Tsonoqua, 77
Twilight Zone, The, 200, 217
Typhon, 28, 90, 93, 136

Uffizi, 196, 197
Ulansey, David, 94, 245
Uncumber, St., 13
Underside of History, The, 221
Unexpected Visitor, The, 152, 155
Uranometria, 107, 117
Uranus, 211
Ursa Major (constellation), 145
Ustinov, Peter, 209

Valentis, Mary, 218
Vampires, Burial, and Death, 234, 248
Vanaspati, 68
Van Buren, E. Douglas, 171
Vinci, Leonardo, da, 195–197
Vasari, Giorgio, 195–197
Velez, Diana, 221
Viollet-le-Duc, Eugene Emmanuel, 165, 167, 168
Virgil (Publius Vergilius Maro), 8, 24, 188, 194, 195, 228
Vishnu, 67, 68
Vitruvius, 120
Vogel, H. C., 115
Volcker, 95

Von Helmholtz, Hermann, 150
Voyage of Argo. See Argonautica

Wace, 10

Wain. *See* Ursa Major

Walker, Alice, 220

Walker, Barbara, 99, 221

Wallace, Lew, 107

Walters, P., 94

Wandor, Michelene, 223

Warrington, 111

Watanabe, Tomio, 248

Weldon, Michael, 208

Welles, Orson, 208

Wells, G. A., 238

Wetherby, 111

White, T. H., 204

White Goddess, The, 95, 221

Wilgefortis, St., 13, 14

Willetts, William, 76

Wilson, Alan, 9

Winston, Stan, 215

Woman of Power, 217

Woman's Encyclopedia of Myths and Secrets, 221

Women: A Journal of Liberation, 217

The Women at the Adonis Festival, 61

Women Who Run with the Wolves, 3

Womongold, M., 220

Wood, Frank Bradshaw, 123

Woodward, Jocelyn M., 47, 50, 52

Wu-ti, 76

Wylie, Philip G., 10

Xochipilli-Piltzintecuhtli, 55, 56

Xolotl, 79

Yama, 248

Yarbus, Alfred L., 152–156

Yoalactecotli, 79

York, 111

Yorkshire, 111

Yu, 75

Yucatan, 94

Yvain, 10

Zen, 77

Zeus, 5, 6, 8, 24, 25, 28, 43, 45, 69, 134, 136, 137, 147, 148, 157,
210, 211, 212, 213, 214, 217, 227, 235, 241

Zeus: A Study in Ancient Religion, 44, 50, 139, 157

Zimmer, Ernst, 115